Forest Dept.
Madras Presy.
report.
1889-90 to 1892-93

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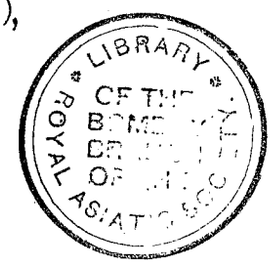
OF

THE FOREST DEPARTMENT

(SOUTHERN AND NORTHERN CIRCLES),

MADRAS PRESIDENCY,



FOR THE

134082

OFFICIAL YEAR

1889-90.

20/5/15

MADRAS:
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1890.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE SOUTHERN CIRCLE, MADRAS,

FOR THE YEAR 1889-90.

By Colonel I. CAMPBELL WALKER, Staff Corps, Conservator of Forests.

CHAPTER I.

Introductory Remarks.

Mr. A. W. Peet, Acting Conservator, was in charge of the Circle throughout the year, having been relieved on the 28th March 1890.

He visited all the districts in the Circle except Chingleput and Tanjore.

2. The District Forest offices of Chingleput, Salem, North Coimbatore, North Malabar and South Canara were inspected and reported on by Treasury Deputy Collectors; and those of North Arcot, North and South Coimbatore by the Examiner of Forest Accounts.

The examination of Range offices by District Forest Officers was still insufficient owing to press of other work, especially forest settlement.

3. The time spent in camp by District Forest Officers as reported appears to have been sufficient, the average having as usual been a little over half the time in charge.

Several District Forest Officers were tied to head-quarters revising settlement records, and the District Forest Officer, South Malabar, having no Range-officer at Nilambúr was unable to devote sufficient time to inspection of outlying ranges, viz., Pálghat and Amarampalam.

The want of sufficient officers of the controlling staff was much felt. Of the subordinate officers who acted as District Forest Officers during the absence of permanent incumbents, 3 were Sub-Assistant Conservators of the 1st and 2nd grades, 1 a probationary Sub-Assistant and 3 Rangers of the 1st, 2nd and 3rd classes, respectively.

The Government ordered during the year that the Trichinopoly and Tanjore districts should be regarded as one forest division.

CHAPTER II.

AREAS AND BOUNDARIES.

4. *Areas.*—The following table shows the changes in the areas of Government Forest lands:—

ABSTRACT A.—Classes and areas of forests.

Class of forests.	Area on 31st March 1889.	Added during the year 1889-90.	Exeluded during the year 1889-90.	Difference.	Area on 31st March 1890.	Source or cause of increase or decrease.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	
Reserved forests	2,800	119	6	+ 113	(a) 2,913	91 square miles transferred from reserved lands; 28 square miles added and 6 square miles deducted owing to rectification of areas.
Reserved lands	5,298	336	113	+ 223	(b) 5,521	Added 172 square miles from "other forests"; 46 square miles new areas; 6 square miles added in course of settlement and 112 square miles added in rectification of areas; deducted 91 square miles transferred to reserved forests; 13 square miles excluded during settlement; and 9 square miles deducted by rectification of areas.
Other forests	1,646	98	303	— 205	1,441	New areas added 98 square miles; transferred to reserved lands 172 square miles; deducted by rectification of areas, 131 square miles.
Total ..	9,744	553	422	+ 131	9,875	

(a) Includes Tekadi leased forest in South Coimbatore 26 square miles, and 4 blocks of leased forests in South Malabar aggregating 11 square miles.

(b) Includes 12 blocks of leased forests in South Malabar, aggregating 18 square miles, proposed to be constituted reserved forests.

The 194 square miles exhibited as "reserved forests under previous rules" in the last annual report having really been areas regarded as *reserved* in view to future notification under the Act, they have been included under "other forests," meaning other than those classed as reserved forests or lands.

5. The question of what further areas of Government waste lands shall be brought under the regular control of the department is receiving attention.

Meanwhile the following abstract in the form adopted by Government showing (*a*) the district areas, (*b*) the areas of lands at the disposal of Government, and (*c*) those of forests under our control will be found useful for reference:—

ABSTRACT B.—District areas and forest reserves in square miles.

District.	Total area excluding feudatory and tributary states as per Board's Procs., dated 26th November 1889, No. 536 (Sett., L. Rds. and Agri.)	Area excluding zemindaris and whole inam villages.	Cultivated area.	Remainder.			Forests under the control of the Forest Department.	
				Uncultivated and forest areas.	Area for which returns are not available.	Total of columns 5 and 6.	Reserved forests under Act V of 1882.	Reserved lands.
1	2	3	4	5	6	7	8	9
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Chingleput	2,841	2,051	952	1,099	..	1,099	93	84
North Arcot ..	7,496	3,768	1,259	2,509	..	2,509	377	576
South Arcot ..	5,140	4,860	2,177	2,683	..	2,683	119	430
Salem	7,724	5,581	1,946	3,635	..	3,635	643	541
Trichinopoly ..	3,631	2,684	1,624	780	280	1,060	137	99
Tanjore	3,740	2,485	1,682	803	..	803	9	16
Coimbatore	7,860	7,168	3,691	2,384	1,093	3,477	685	1,848
Madura	8,800	3,190	1,563	1,254	373	1,627	348	215
Tinnevelly	5,391	3,517	2,257	1,260	..	1,260	295	295
Malabar	5,588	5,565	1,330	4,235	..	4,235	157	443
South Canara ..	3,902	3,883	628	3,255	..	3,255	50	974
Total ..	62,113	44,752	19,109	23,897	1,746	25,643	2,913	5,521

District.	Forests under the control of the Forest Department—*cont.*			Percentage of column 10 to column 3.	Percentage of column 10 to column 7.	Percentage of column 12 to column 3.	Percentage of column 12 to column 7.
	Total of forest reserves, columns 8 & 9	Unclassed or other forests.	Total of columns 10 and 11.				
	10	11	12	13	14	15	16
	SQ. MLS.	SQ. MLS.	SQ. MLS.				
Chingleput	177	27	204	8·6	16·1	9·9	18·6
North Arcot	953	..	953	25·3	38·0	25·3	38·0
South Arcot	549	519	1,068	11·3	20·5	22·0	39·8
Salem	1,184	322	1,506	21·2	32·6	27·0	41·4
Trichinopoly	236	42	278	8·8	22·3	10·3	26·2
Tanjore	25	41	66	1·0	3·1	2·7	8·2
Coimbatore	2,533	2	2,535	35·3	72·9	35·4	72·9
Madura	563	136	699	17·6	34·6	21·9	43·0
Tinnevelly	590	17	607	16·8	47·0	17·3	48·2
Malabar	600	335	935	10·8	14·2	16·8	22·1
South Canara	1,024	..	1,024	26·4	31·5	26·4	31·4
Total ..	8,434	1,441	9,875	18·8	32·9	22·0	38·5

The net increase in the area of reserved forests and reserved lands amounted to only 113 and 223 square miles respectively, and the total reserves now aggregate 8,434 square miles, which is about 18 per cent. of the district areas, excluding zemindaris and inams, and about 32 per cent. of the "lands at the disposal of Government." The net increase in the total forest area of all classes under our control amounted to only 131 square miles during the year.

6. *Reserved forests.*—The area constituted reserved forests in each district is as follows:—

Abstract C.—Reserved forests in square miles.

District.	Up to 1888-89.	During 1888-89.	During 1889-90.	Total.
1	2	3	4	5
Chingleput	87	5	1	93
North Arcot	195	174	8	377
South Arcot	62	32	3 + 22	119
Salem	559	39	45	643
Trichinopoly	44	92	1	137
Tanjore	..	8	1	9
North Coimbatore	99	20	..	119
South Coimbatore	566	..	..	566
Madura	304	23	21	348
Tinnevelly	287	..	8	295
North Malabar	118	..	..	118
South Malabar	39	..	..	39
South Canara	42	5	3	50
Total ..	2,402	398	113	2,913

The total area of "reserved forests" is now 6·5 per cent. of the district area excluding zemindaris and "whole inams." The largest actual additions to this class were made in the districts of Salem and Madura. In other districts the additions were insignificant.

In South Arcot 22 square miles were added on account of recomputation of areas.

The final constitution of reserved forests has proceeded very slowly during the year. This is due to delays in the District and High Courts in the settlement of appeals against Forest Settlement Officers' decisions and in the publication of final notifications under section 16 of the Act.

In addition to the area added for the year sixteen blocks * aggregating 22 square miles were finally notified before its close, but as the date from which reservation takes effect falls within the current year, they are not included in the return of reserved forests for 1889-90.

	No. of blocks.	Area in square miles.
* Chingleput	12	13
South Arcot	1	5
Trichinopoly	1	1
Tinnevelly	2	3

7. Reserved lands under settlement.—The following table shows the progress of settlement up to the end of the year in blocks and square miles:—

ABSTRACT D.—Forest Settlement.

District.	Under settlement up to 1888-89.		Added during 1888-89.		Added during 1889-90.		Total under settlement.	
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
1	2	3	4	5	6	7	8	9
Chingleput	30	113	17	18	32	25	79	156
North Arcot	83	683	2	50	7	125	92	858
South Arcot	70	234 (*+22)	15	49	..	108	85	413
Salem	94 (†−1)	806	12	160	3	16	108	982
Trichinopoly	41	178	33	19	..	..	74	197
Tanjore	20	19	4	..	..	..	24	19
North Coimbatore ..	8	589	2	187	1	103	11	879
South Coimbatore ..	9	566	1	..	..	..	10	566
Madura	90	488	4	12	..	..	94	500
Tinnevelly	39	589	..	..	..	..	39	589
North Malabar	13	261	..	..	..	..	13	261
South Malabar	16	58	5	241	..	..	21	299
South Canara	21	141	1	3	5	9 (*−1)	27	152
Total ..	533	4,747	96	739	48	385	677	5,871

District.	Finally settled up to 1888-89.		Finally settled during 1888-89.		Finally settled during 1889-90.		Total finally settled.	
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
	10	11	12	13	14	15	16	17
Chingleput	14	87	3	5	3	1	20	93
North Arcot	33	195	5	174	6	8	44	377
South Arcot	14	62	8	32	4	3 (+22)	26	119
Salem	62	559	4	39	4	45	70	643
Trichinopoly	21	44	10	92	2	1	33	137
Tanjore	2	..	14	8	1	1	17	9
North Coimbatore	6	99	..	20	..	..	6	119
South Coimbatore	9	566	..	..	1	..	10	566
Madura	71	304	2	23	3	21	76	348
Tinnevelly	5	287	..	..	16	8	21	295
North Malabar	6	118	..	..	..	..	6	118
South Malabar	6	39	..	..	..	..	6	39
South Canara	8	42	5	5	1	3	14	50
Total ..	257	2,402	51	398	41	113	349	2,913

* Due to recomputation of area.
† One block, viz., Yercaud lake, area 22 acres, ordered to be unreserved.

8. The position of the balance still under settlement is shown in the following abstract:—

ABSTRACT E.—State of settlement balance.

District.	Of those notified in 1884-85.		Of those notified in 1885-86.		Of those notified in 1886-87.		Of those notified in 1887-88.		Of those notified in 1888-89.	
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
1	2	3	4	5	6	7	8	9	10	11
Chingleput	..	..	..	..	5	9	6	11	16	18
North Arcot	..	..	..	..	..	..	39	306	2	50
South Arcot	..	..	11	164	17	32	16	17	15	81
Salem	9	74	1	16	1	8	13	66	11	159
Trichinopoly	..	..	3	3	7	39	..	..	31	18
Tanjore	..	..	..	..	1	7	2	3	4	..
North Coimbatore ..	..	..	..	..	..	..	2	470	2	187
South Coimbatore ..	..	..	..	..	..	..	..	..	..	..
Madura	..	..	..	..	2	40	12	100	4	12
Tinnevelly	..	..	5	252	..	..	13	42	..	..
North Malabar	3	103	3	40	1	..	..	..	..	..
South Malabar	..	..	..	..	..	..	10	19	5	241
South Canara	..	..	2	35	4	21	1	35	1	2
Total ..	12	177	25	510	38	156	114	1,069	91	768

District.	Of those notified in 1889-90.		Total balance.		Remarks on the balance.					
					Settled and reported on.		Settled but not reported on.		Settlement proceeding.	
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
	12	13	14	15	16	17	18	19	20	21
Chingleput	32	25	59	63	38	44	16	14	5	5
North Arcot	7	125	48	481	40	326	1	30	7	125
South Arcot	..	..	59	294	36	160	8	53	15	81
Salem	3	16	38	339	22	170	13	153	3	16
Trichinopoly	..	..	41	60	40	60	1	..	..	..
Tanjore	..	..	7	10	6	10	..	..	1	..
North Coimbatore ..	1	103	5	760	..	..	4	657	1	103
South Coimbatore ..	..	..	..	..	..	..	..	..	..	..
Madura	..	..	18	152	16	140	2	12	..	..
Tinnevelly	..	..	18	294	18	294	..	..	..	..
North Malabar	..	..	7	143	1	..	6	143	..	..
South Malabar	..	..	15	260	..	..	10	19	5	241
South Canara	5	9	13	102	5	56	4	37	4	9
Total ..	48	278	328	2,958	222	1,260	65	1,118	41	580

The "settled and reported on" balance of 222 blocks with an area of 1,260 square miles (columns 16 and 17) is composed of the following:—

16 blocks of	22	square miles notified under section 16 during the year, but date from which final reservation is to take effect falls within current year.
91 blocks of	428	square miles mostly either with the Board or Government awaiting publication of notifications under section 16.
115 blocks of	810	square miles returned by the Board for revision and remaining either with the District Forest Officer, Collector, or Forest Settlement Officer.
Total ... 222 blocks.	1,260	square miles.

The work remaining to be done in regard to the blocks returned for revision is generally the preparation of clearer maps and the improvement of the boundary descriptions. Of the 65 blocks, embracing an area of 1,118 square miles, "settled but not reported on" (columns 18 and 19), 24 with an area of 197 square miles were awaiting the result of appeals to higher courts against Forest Settlement Officers' decisions.

The submission of notification for most of the remaining blocks "settled but not reported on" (columns 18 and 19) was delayed on account of the sketch-maps and other details now required, which our over-worked District and Range officers find it difficult to supply without the assistance of competent draughtsmen.

Of the blocks in respect of which settlement was proceeding (columns 20 and 21), the settlement of the newly purchased Amarampalam forest in South Malabar was delayed owing to the non-appointment of a Forest Settlement Officer till December 1889. The proclamation under section 6 has since been issued fixing 15th May as the latest date for presentation of claims.

Regarding the four blocks of the proposed reservations in the Attapadi valley, the Forest Settlement Officer, Mr. Castlestuart Stuart, completed the inquiry, and his decisions were awaited at the close of the year. It is apprehended that whatever they may be, there will be appeals to the District and High Courts.

9. Of the two special Forest Settlement Officers (Messrs. A. M. Jones and A. Pinto) attached to this circle, Mr. Jones was, under orders from Government, relieved of forest settlement-work on 27th June 1889. Mr. Pinto retained temporary charge of Mr. Jones' office and issued proclamations under section 6 of the Forest Act for eight blocks measuring 91 square miles, and proclaimed final notifications for six blocks of 50 square miles which have been included in the following outturn of work by Mr. Pinto. Mr. W. C. McMurray, Deputy Collector, was appointed Forest Settlement Officer in the place of Mr. Jones, but he only joined this department on the 28th February 1890. Thus the services of one of the two special officers were lost to the Circle for a period of eight months. These changes also interfered with the due progress of settlement. The work performed by the special officers during the year was as follows :—

ABSTRACT F.—Outturn of work by Special Forest Settlement-officers.

	Issue of proclamation after notification under section 4.		Settlement of claims.		Report after settlement submitted.		Final notification proclaimed.		Cost.
	Blocks.	Area in square miles.	Blocks.	Area in square miles.	Blocks.	Area in square miles.	Blocks.	Area in square miles.	
1	2	3	4	5	6	7	8	9	10
									RS.
Mr. Pinto	42	304	36	599	32	45	46	104	13,271
,, Jones	..	..	6	106	30	29	5	5	3,795
Total outturn of work during 1889-90	42	304	42	705	62	74	51	109	17,066
Outturn during 1888-89 ..	90	495	149	557	159	734	46	393	22,766
Difference for the year under report.	..	— 191	..	+ 148	..	— 660	..	— 284	— 5,700
Percentage of do. ..	..	— 39	..	+ 26	..	— 90	..	— 72	— 25

It will be observed that there is a slight increase in the area in respect to which claims were settled and a decrease in the total cost which, however, is mainly due to there being only one Forest Settlement Officer during eight months of the year. The delay in submission of final reports and in the issue of final notifications under section 16 of the Act is very marked and most unsatisfactory, but is apparently due to circumstances over which the Forest Settlement Officers had little or no control.

The total cost of forest settlement during the year amounted to Rs. 18,307, which includes Rs. 660 expended by Mr. McMurray in March 1890, and Rs. 581, being the pay of a Forest Settlement clerk in Malabar employed under Mr. Castlestuart Stuart.

The total cost since the commencement of settlement up to the end of the year under report has amounted to Rs. 1,48,201.

The total area of reserved forests as per Abstract C is 2,913 square miles, and by adding 1,260 square miles (column 17, Abstract E) "settled and reported on" on 31st March 1890, we have 4,173 square miles. Each square mile settled has thus cost on an average a little over Rs. 35.

10. *Reserved lands not under settlement in square miles.*—The following table shows (*a*) additions to the area of reserved lands, (*b*) areas transferred for settlement as reserved forests, and (*c*) the balance remaining as reserved lands :—

ABSTRACT G.—Reserved lands not under settlement in square miles.

District.	Up to 1888-89.	Added during 1888-89.	Added during 1889-90.	Total.	TRANSFERRED FOR SETTLEMENT.			Total.	Balance remaining as reserved lands.
					Up to 1888-89.	During 1888-89.	During 1889-90.		
1	2	3	4	5	6	7	8	9	10
Chingleput	137	16	24	177	113	18	25	156	21
North Arcot	861	50	42	953	683	50	125	858	95
South Arcot	234	49	(*a*) 244	549	234	49	108	413	136
	(*b*)+ 22	..	..	..	(*b*)+ 22	..	..	..	..
Salem	1,010	158	16	1,184	806	160	16	982	202
Trichinopoly	234	2	..	236	178	19	..	197	39
Tanjore	19	6	..	25	19	..	..	19	6
North Coimbatore	1,952	..	(*b*)— 3	1,949	589	187	103	879	1,070
South Coimbatore -	584	..	..	584	566	..	..	566	18
Madura	563	..	..	563	488	12	..	500	63
Tinnevelly	591	— 1	..	590	589	..	..	589	1
North Malabar	281	..	(*c*)— 8	273	261	..	..	261	12
South Malabar	86	241	..	327	58	241	..	299	28
South Canara	1,020	5	(*b*)— 1	1,024	141	3	8	152	872
Total ..	7,594	526	314	8,434	4,747	739	385	5,871	2,563

(*a*) Of this area 108 square miles represent addition by rectification of areas notified in previous years.
(*b*) Due to recomputation of area.
(*c*) Unreserved after settlement.

The area, viz., 314 square miles, added to reserved lands during the year, consists of 136 square miles in South Arcot, constituted under the rules under section 26 of the Act, 82 square miles in Chingleput, North Arcot and Salem, notified for settlement under section 4, and 96 square miles added by recomputation of areas, &c.

Of the 385 square miles transferred for settlement during the year, 83 in North Arcot, 103 in North Coimbatore and 8 in South Canara, aggregating 194 square miles in all, were from areas of reserved lands constituted in previous years; 82 square miles represent new areas notified under section 4 during the year and 109 square miles is the addition by recomputation of areas brought to account in previous years.

The area of reserved lands was 2,563 square miles at the close of the year.

The unclassed forests, as far as they were recorded, showed a balance of 1,441 square miles on 31st March 1890.

There is thus ample scope for further constitution of reserved forests, if only settlement can be pushed on more rapidly than it has been hitherto.

11. *Boundaries.*—The following lengths are reported to have been taken in hand for demarcation :—

—	Miles.	Cost.	Average.
1	2	3	4
		RS.	RS. A. P.
Up to 1888-89	6,013	55,595	9 4 0
During 1888-89	1,572	16,191	10 5 0
Do. 1889-90	1,290	13,297	10 5 0
Total ..	8,875	85,083	9 9 0

The largest expenditure on demarcation during the year, viz., Rs. 3,790, was in Salem where line-clearing of certain reserved forests and reserved lands under settlement was specially taken in hand so as to have their boundaries ready for survey by the Government of India Party. The clearing alone cost Rs. 7 per mile on an average.

Notices under the Boundaries Act were served on the owners of four private forests, of whom two completely cleared their boundaries and one did so partially. The poligar of Ariagounden Nad had not begun work up to the close of the year.

In *South Arcot*, the eastern boundary of the Jadayagounden Polliem (Kalarayen slopes) which is contiguous to the Tekarai and Kanai reserved lands under settlement in the Kallakurchi taluk was cleared to a length of 12 miles and to a width of 4 to 5 yards, at a cost of Rs. 139-6-0 recoverable from the poligar, as he failed to comply with a notice to clear lines issued to him under the Boundaries Act.

In *North Coimbatore*, 275 miles of preliminary demarcation 6 feet wide and 122 miles of permanent demarcation 12 feet wide were cleared and 932 cairns erected. The expenditure amounted to Rs. 3,106. The work in this division is reported to be unsatisfactory and the cost high. It is evident that Range officers have seriously neglected the work. The matter will receive attention during the Conservator's next tour in the division; meantime, the District Forest Officer promises to attend to the work personally.

In *Chingleput*, fair progress has been made, and Rs. 1,729 expended. The average cost per mile, Rs. 22½, appears high and exceeds that of the previous year. The District Forest Officer explains that it is due to re-clearance of boundary lines wrongly cut in previous years. Preliminary demarcation in this district was carried out by planting palmyra posts 10′ × 6″ × 3″ costing As. 6 each including all expenses. This is stated to have been required by the Forest Settlement Officer, but is clearly unnecessary in all cases and very expensive as the posts will have to be replaced by more permanent boundary marks when the areas are finally constituted reserved forests.

In *Tinnevelly*, Rs. 1,062 were expended in clearing 123 miles, the average cost being Rs. 8½ per mile, which is moderate, considering the remarks of the Deputy Superintendent of the Government of India Survey, that the arrangements were very good and little or no difficulty was experienced in survey.

In *Madura*, the southern boundary of Erasakanayakanur zemindari was completely and correctly marked out (by means of temporary pillars) in accordance with the decree of the District Court. The zemindarni was duly informed of this fact by the District Forest Officer and her acceptance of the line sought, but no reply was received from her up to the close of the year. If difficulties are raised a Special Commissioner will have to be appointed to go over the work again. The Ayakudi boundary requires to be corrected in certain parts by the Survey Department.

In *North Malabar*, the demarcation of 13 blocks of the Kudrakote reserved forest is not complete. 9½ miles of boundary line have been cut and cleared to a width of 18 feet and 21 miles of line to a width of 6 feet and substantial cairns have been erected. The difficulty of procuring labor and the illness of Range officers retarded further progress.

In *South Malabar*, no further attempt at the preliminary demarcation on the slopes of the ghâts in the newly purchased Amarampalam forest was made during the year for want of a suitable and special ranger to conduct work. The demarcation of certain portion of the Chenat Nair reserved forest in Pálghat range was resumed at the close of the year, but only 3 out of the remaining 17 miles were cleared. The locality is very feverish, and it is with difficulty that laborers can be induced to work there; but greater progress should have been made by an energetic Range officer and, doubtless, would have been, had the District Forest Officer not been tied to Nilambúr and unable to spend sufficient time in the Pálghat range.

CHAPTER III.

Surveys and Working Plans.

12. Surveys have cost Rs. 75,168 during the year, *i.e.*, Rs. 69,085 for the Survey of India Party and Rs. 6,083 for departmental surveys. The excess expenditure (Rs. 17,565) over budget provision has been met by transfers from other heads.

The total outturn of work by the Government of India Survey Party during the season 1889-90 amounted to 1,182 square miles of (*a*) triangulation, 628 linear miles of (*b*) traversing, and 211 square miles of (*c*) topography.

	(*a*)	(*b*)	(*c*)
Salem	710	288	...
Madura	472	150	78
Tinnevelly	...	190	133

The details are given in the Deputy Superintendent's précis of his Annual Report printed with Revenue Board's Proceedings of 10th May 1890, Forest No. 263.

The short outturn of work is much to be regretted, but the Deputy Superintendent attributes it chiefly to causes beyond control.

The approximate area topographically surveyed on the 4-inch scale during the past two years is only 480 square miles, and the actual cost Rs. 1,08,422 or about Rs. 226 per square mile; but, of course, there are the triangulations and traversing in advance to be taken into account. It is hoped, however, that when the party is properly organized, the cost per square mile may not exceed the limit of Rs. 70 referred to in "Note on forest surveys" printed with G.O., dated 8th August 1888, No. 545, and that the annual outturn of work may come up to the Deputy Superintendent's estimate of 600 square miles.

In *Salem*, a temporary surveyor was employed by the department for 7 months. He surveyed a portion of Maharajagadai reserved land and the compartment lines of two other reserves, but his services were chiefly utilized in preparing sketch-maps, &c.

In *Madura*, clearing of lines for survey purposes was carried on on an extensive scale at a cost of Rs. 3,049. The lines embraced 18 reserved forests with an area of 172 square miles, but the District Forest Officer does not report the mileage cleared or its breadth.

In *Tinnevelly*, an expenditure of Rs. 1,550 was incurred in clearing interior lines and pathways for survey.

In *South Canara*, a temporary surveyor was at work during the whole year and surveyed an area of 75 square miles at a cost of Rs. 972, besides preparing original sketches and plotting of the surveys made. He also made copies for photo-zincography of four small blocks and of one large one embracing 34 square miles; but they have not been received in this office.

The areas reported as surveyed departmentally up to the end of the year are as follows:—

—	Square miles.	Cost.	Remarks.
1	2	3	4
		Rs.	
Up to 1888-89	1,279	11,978	
During 1888-89	170	5,861	
Do. 1889-90	75	6083*	* Includes Rs. 4,599 expended on line-clearing for survey by the Government of India.
Total ..	1,524	23,922	

The Madras Survey Department took up the survey of the Kodaikánal settlement in Madura and marked out the boundaries of private holdings permanently. Various disputes arose with regard to lands adjoining the Government Kodaikánal shola, the decision of which devolved on the Deputy Superintendent of Survey. His decisions were not communicated to this department till the close of the year, notwithstanding several reminders sent to him on the subject by the District Forest Officer.

13. *Working plans.*—In accordance with Board's Proceedings of 8th January 1890, Forest No. 11, District Forest Officers have been directed to collect the necessary statistics for future working plans with the assistance of Taluk Revenue Officers.

It is intended to submit revised working plans for the Chinnar and Nóyil-Vellingiri working circles in the Bolampatti range of South Coimbatore in lieu of those submitted to Government in 1887-88, which were based on insufficient data as to the number and dimensions of trees and prospects of natural reproduction and sustained yield. The working "scheme" for the Sholakarai block in the same division also requires slight revision mainly to provide a separate rotation for the bamboo series and make provision for improvement fellings. The working plan for this block has, on the whole, proved reliable, and the estimates framed of the annual yield both in material and value have been exceeded.

The working plan for the Tekadi forest on the Anamalais, which was drafted three years ago and under which preliminary fellings have since taken place, will be revised so as to provide better both for a sustained yield from existing stock and assisting the reproduction of the better classes of trees. Mr. Peet writes: "The result of the system of pure Jardinage as applied to a teak forest is almost certain to be a diminution of the stock of superior trees, for teak in particular has no chance unless it has abundance of light, and unless special efforts are made to ensure this, it is almost certain to be crowded out by the inferior growths." The working plan of the Wáláyar reserve in South Malabar, received from the District Forest Officer, was examined by the Acting Conservator and found to be faulty. It will be revised during the current year.

Mr. Porter appears to have drawn up a working plan for some of the forests in the Polláchi No. 2 Range, but it has not yet been received by the Conservator.

In *Chingleput*, the District Forest Officer found the working plan which he had completed in the previous year for the Kambakam reserve defective in many respects, and has not therefore submitted it for approval. Little progress has been made with regard to working plans for Ambakam and Meyur.

In *North Arcot*, felling was commenced in Compartment No. 2 (39·9 acres) Virinjipuram, of the plantation working circle, but not completed during the year. The outturn up to the close of the year was 225 tons of billet wood and 20 tons of branch wood. The District Forest Officer's estimate of yield is 1,000 tons (which he expects will be realized) as against 1,200 tons according to the working plan. The block was planted in 1872 and the planting rendered irregular owing to numerous casualties during the several dry seasons. According to working scheme, Compartment No. 8 (41·9 acres) of Tiruvallam should have been felled in 1888-89, but as a large number of trees which were dying out in Compartments Nos. 6 and 7 had to be removed and brought to market, the felling of Compartment No. 8 was only taken in hand late and completed during 1889-90. The outturn of wood amounted to 600 tons.

In *Salem*, statistics were being collected to form a working circle for railway fuel supplies, &c. The outturn from 6,079 selected trees over 700 acres was 79,039 cubic feet, or 1,162 tons of stacked billets.

In *Trichinopoly*, the sanctioned working plan of the Cauvery line plantations was adhered to.

In *Madura*, the provisions of the working plans proposed by the District Forest Officer, Mr. Gass, both for Alagarmalai and Gunden Shola, were carried out during the year in anticipation of their submission and sanction.

CHAPTER IV.

PROTECTION AND IMPROVEMENT.

(a) *Establishment, Ranges and Beats.*

14. *Establishment.*—The establishment for the Circle consisted of—

—	For the year 1888-89.	For the year 1889-90.	Difference.
Permanent.			
Conservators	1	1	..
Deputy Conservators	7	8	+ 1
Assistant Conservators	6	5	— 1
Sub-Assistant Conservators	7	7	..
Rangers	33	33	..
Foresters	77	77	..
Forest Guards	396	396	..
Clerks	88	88	..
Peons	108	108	..
Temporary.			
Supervisors	59	61	+ 2
Surveyors	7	2	— 5
Draughtsmen	2	1	— 1
Depôt-keepers	11	10	— 1
Watchers	779	852	+ 73
Tannahdars	302	289	— 13
Lascars	23	7	— 16
Gardeners	73	78	+ 5
Clerks	9	9	..
Peons	18	18	..
Total ..	2,006	2,050	+ 44

The new scale for permanent subordinate establishments referred to in the last annual report as being pending with Government was not approved. Revised proposals are under preparation and will be shortly submitted under which sanction will be sought for the entertainment of an establishment more in accordance with present requirements, *i.e.*, for the adequate protection of about 10,000 square miles of reserved forest and the collection of a revenue of about 10 lakhs of rupees. The numerical weakness of the executive and protective staff has been repeatedly acknowledged by the Local Government and the Government of India; and now that the revenue has sufficiently increased it is hoped that a considerable augmentation may be sanctioned.

The Board of Revenue at the instance of Government lately deprecated any increase in the number of reserve watchers chargeable to A-VIII (*f*) and a slight increase in numbers which was indispensable had to be met by a reduction in the numbers of tannahdars and by a reduction in the pay of watchers so as to increase their numbers without extra cost. The result of inadequate protection will be referred to in the next section of this report.

The number of ranges remained the same as in the previous year, viz., 69. More than one half have been in charge of underpaid Foresters and in some instances even of Forest Guards. The average area of a range charge embraces 900 square miles of country of which 143 square miles is actual forest under the direct control of the department. The average area of a Forest Guard's beat may be reckoned at 157 square miles of country with 25 square miles of forest area under control. The strength of the superior staff is equally weak and as the Board and Government are aware Forest Rangers had in some instances to be appointed to act as District Forest Officers. If the annual increase in revenue is to continue, and real and efficient protection and improvement of the forests to be secured, the staff of controlling, executive, and protective officers must be considerably augmented at an early date.

(b) *General Protection and Breaches of Forest Laws.*

15. General protection of forests has not been adequate as may be inferred from the following figures and notes relating to breaches of the Forest Laws.

District or Division.	Brought forward from previous year.	Added during the year.	Cases disposed of during the year.								Balance remaining undisposed of at the close of the year.
	Number of cases.	Number of cases.	Number of cases disposed of.	Number of persons concerned.	Percentage of cases withdrawn to the total number disposed of.	Percentage of cases compounded to the total number disposed of.	Amount of compensation realized.	Percentage of cases disposed of by the magistracy to the total number disposed of.	Percentage of cases in which conviction was secured to the total number disposed of by the magistracy.	Percentage of cases acquitted to the total number disposed of by the magistracy.	Number of cases.
1	2	3	4	5	6	7	8	9	10	11	12
							Rs.				
Chingleput ..	..	92	92	206	..	2	15	98	57	43	..
North Arcot ..	5	255	253	590	..	59	1,735	41	36	64	7
South Arcot ..	50	430	375	1,035	12	59	2,702	30	77	23	105
Salem	60	470	501	1,911	9	18	850	74	77	23	29
Trichinopoly ..	41	646	609	1,165	..	80	1,844	20	74	26	78
Tanjore	9	51	56	118	..	41	77	59	70	30	4
North Coimbatore.	..	37	30	89	3	33	244	63	68	32	7
South Coimbatore.	3	107	98	341	4	75	617	20	80	20	12
Madura	13	28	41	149	..	..	..	100	59	41	..
Tinnevelly ..	5	81	81	211	..	..	..	100	58	42	5
North Malabar ..	2	48	50	171	..	60	427	40	65	35	..
South Malabar ..	..	23	21	41	..	..	..	100	95	5	2
South Canara ..	19	411	361	434	..	28	151	71	78	22	69
Total for 1889-90.	207	2,679	2,568	6,461	4	46	8,662	50	70	30	318
Do. 1888-89.	173	2,201	2,167	5,557	4	41	4,915	55	72	28	207
Difference for the year under report	+ 34	+ 478	+401	+904	..	+ 5	+3,747	— 5	— 2	+ 2	+ 111

The number of new cases shows an increase of 22 per cent. over that of the preceding year. The offences of unauthorized felling of wood and grazing without permission increased by 21 per cent. and 44 per cent., respectively. There was also an increase of 5 per cent. under "other offences." The increase occurred in the districts of Chingleput, North Arcot, South Arcot, Coimbatore and South Canara.

Unless general protection is rendered more effectual, which is impossible with the present inadequate and underpaid staff, no reduction in the number of forest offences can be expected. Unauthorized cultivation of reserved lands is of frequent occurrence and we can scarcely blame the people in the absence of sufficient protective establishments. A case recently occurred in the Saidápet taluk of the Chingleput district in which 68 men were prosecuted and fined one rupee each for erecting huts without permission inside a "reserved land." There are 18 reserves in the taluk in charge of but one Forest Guard and 4 watchers. This gives 18 blocks to one Guard and 4 or 5 blocks to each watcher to supervise. The blocks are 4 or 5 miles apart. Under such circumstances, protection is out of the question.

The Collector of Chingleput (Mr. M. Hammick) says: "It is quite clear that the protective staff of the Saidápet taluk is insufficient.

* * * * *

"The forests in Saidápet are of course peculiarly situated and I imagine if there is to be any protection worth the name, the staff must be very much strengthened and

constituted on a scale which would seem extraordinarily large when compared with the protective staff of other districts. The jungles are so small and scattered and the thieves so numerous and the village establishments so very bad."

Protection is notoriously inadequate in other respects and localities. For instance, smuggling of timber in the Kollegál and Satyamangalam taluks of the North Coimbatore division is reported to be very common. Forests have been set on fire everywhere by native shikaris and persons searching for deer horns. Demarcation posts and pillars have been systematically injured and removed. There has also been shooting, netting, and trapping game without licenses, whilst rivers have been poisoned and dynamited and the fish destroyed wholesale. The District Forest Officer (Mr. Morgan) personally came in contact with a gang of about 1,000 people shooting and hunting in the eastern slopes of Nílgiris reserved forest and the Tallamalai block without licenses. They had killed a very large number of deer, pea-fowl and hares. Mr. Morgan was only able to secure the prosecution of about 20 men. He also personally caught 22 men netting spotted deer in the eastern slopes reserved forests on the banks of the Bhaváni without permission. Eight soldiers camped for a month near Vellamundi reserved forest and shot there without licenses, but were not interfered with. In short the law has been not unfrequently openly set at defiance. The numerical weakness of our executive and protective staff is chiefly responsible for such a state of things.

In Salem only 19 shooting licenses were issued though many hundreds of people doubtless shoot. It has been arranged to affix a slip to all gun licenses issued informing the holders that a license from the Forest Department is required if they wish to shoot in reserved areas. A similar plan might with advantage be adopted in other districts.

There was an increase of 19 per cent. in the number of cases disposed of during the year. The number of cases prosecuted before magistrates decreased by 5 per cent., the number compounded by Forest Officers exhibiting a proportionate increase.

The compensation realized shows an average of Rs. 7-4-9 per case and Rs. 3-2-5 per person accused as against Rs. 5-7-8 and Rs. 2-2-8, respectively, last year. The increase is chiefly due to larger amounts of compensation having been levied in a few important cases of setting fire to reserved forests, felling of reserved trees without permit, &c.; *e.g.*, in a case of the latter class in which a village monigar in North Arcot was the offender, a heavy deterrent punishment was considered desirable and Rs. 200 was levied from him as compensation. The largest number of forest offences appear to have occurred in Trichinopoly where there were no less than 646, of which 591 were for unauthorized felling, &c.; 488 cases in which 920 persons were concerned were compounded. The fewest offences are reported from South Malabar where out of a total of 23 cases, all brought before the magistracy, convictions were obtained in twenty. On the whole and of course with exceptions due to local circumstances, &c., the Conservator is inclined to think that the fewer prosecutions the better the protection; but of course there are notable exceptions, *e.g.*, in North Coimbatore for last year, where, if half the forest offences had been reported the numbers would have been thousands instead of 37!

District Forest Officers naturally prefer compounding to prosecution before a magistrate which entails the presence of the Range officers and Forest Guards in court sometimes for several days to the detriment of their forest duties.

Offenders also as a rule appear to prefer to compound as it saves them legal expenses and the trouble of attending court.

The orders of Government on the subject have, however, evidently been borne in mind during the year. 1,187 cases in all were compounded and 92 withdrawn by District Forest Officers. Convictions were secured in 70 per cent. of the cases brought before the magistracy which is less by 2 per cent. than in 1888-89.

Sub-Magistrates now frequently require corroborative evidence to support that of a Forest Guard or watcher. This is doubtless only reasonable, but on the other hand very difficult to comply with in the case of offences committed and detected in the forests in which the Forest Guards occupy an analogous position to that of a Police

constable on beat. A case of alleged theft of sandalwood from the Pachamalais in Trichinopoly was dismissed for want of evidence to prove that the offender was caught in the act of felling.

It might be well to invite the attention of the magistracy to section 56 of the Forest Act which provides that in case of doubt with regard to ownership of forest produce it shall be presumed to be the property of Government until the contrary is proved. This provision appears to be generally overlooked. The punishments awarded on conviction appear as a rule to have been sufficient, at least there are no complaints on this score in the district reports. There is still complaint on the part of some District Forest-officers of vexatious delays in disposing of forest cases and the District Magistrate, Coimbatore, has called the attention of the Subordinate Magistracy to the fact. During the year Rs. 1,497 was awarded by Magistrates as compensation to the department for damage sustained and credited to forest revenue.

(c) *Forest Fires and Fire Protection.*

16. The actual expenditure on fire protection amounted to Rs. 20,194 which was within Rs. 5,000 of the allotment for the year in the revised budget.

The remarks in paragraph 16 of the annual report for 1888-89 in regard to forest fires and record maps still hold good.

The following is an abstract of results :—

ABSTRACT I.—Fire-protection in square miles.

—	UP TO 1888-89.		DURING 1888-89.			DURING 1889-90.			Total cost per square mile.
	Forest reserves attempted.	Total cost per square mile.	Attempted.	Percentage which escaped.	Average cost per square mile.	Attempted.	Percentage which escaped.	Average cost per square mile.	
1	2	3	4	5	6	7	8	9	10
		RS.			RS.			RS.	RS.
Fire traced ..	1,250	65	1,502	97	13	1,910	99	10	63
Untraced ..	6,305	..	6,596	69	..	6,524	70	..	..
Total reserve ..	7,555	..	8,098	..	..	8,434	..	..	..

408 square miles were added during the year to the firetraced area as against 252 square miles so added during 1888-89. The principal additions were in North Arcot, South Arcot, Tinnevelly and South Malabar. The average cost per square mile was Rs. 10 as against Rs. 13 in the previous year. The reduction in cost occurred in all districts excepting South Arcot, Trichinopoly and South Canara.

The rates vary from Rs. 2 in North Arcot to Rs. 51 in South Canara. The cost in South Canara appears abnormally high, and must form subject for inquiry. It is partly attributed by the District Forest Officer to the irregular shape of the blocks, the perimeter being consequently of great length in proportion to the area.

The percentage of success was 99 as against 97 in 1888-89. The increase is mainly due to the successful protection effected during the year in North Malabar with the co-operation of the Mysore Forest Officers in fire-tracing the frontier lines. The early rains helped a great deal. In South Coimbatore also there were heavy rains in December and January which helped to render fire protection easy and successful. No large fires occurred in any of the protected areas in the Circle. The proportion of area actually protected compared with that attempted was highest in Chingleput, North Malabar and South Coimbatore. In Chingleput only 2 acres are reported to have been burnt out of 23,296 attempted. In North Malabar there appear to have been no fires at all in the specially protected areas, and in South Coimbatore only 15 acres were burnt out of 47,182 attempted. Protection was least successful in North and South Arcot, Madura and Tinnevelly, but the Conservator has doubts as to the reliability of some of the returns and can scarcely believe that nearly 545,000 acres were successfully protected in North Arcot where both the fire lines and protective establishments are notoriously inadequate.

There were twelve fires in *North Arcot*, and seven in *South Arcot*, the area burnt being 3,151 and 1,323 acres, respectively. The fires in South Arcot are said to be chiefly due to the unusual dry season owing to the failure of the north-east monsoon, but the Conservator is inclined to attribute them to want of timely precautions.

In *Salem* also several small fires occurred in protected areas and are attributed to the early commencement of the dry season which found the Range officers unprepared. In some cases fires in the reserves adjoining the railway were clearly caused by sparks from locomotives. In view to minimising such danger in future the Conservator is in communication with the Consulting Engineer for Railways regarding the use of spark catchers and cutting or burning off the grass within the railway fences before the commencement of the fire season. The system of fire-tracing in Salem, especially along the line of railway, is insufficient and Mr. Hooper's special attention has been drawn to the necessity for improving it..

In *North Coimbatore* fire protection has been most backward and the repeated instructions of the Conservator have been neglected. Only 4 square miles were attempted during the year, while the total area of reserved forests alone is 119 square miles.

In *Madura* the year was exceptionally bad for fires and results would have been very unfavorable but for the heavy rains subsequent to January, *i.e.*, after some months of severe drought. Fire protection did not apparently receive sufficiently early and careful attention on the part of Range officers and subordinates. Of the thirteen fires which occurred in specially protected areas, one was caused by negligence in fire-tracing, two spread from Travancore into our forests, one came from Ammayanáyaka-núr zemindari, four were apparently due to incendiarism, and five could not be accounted for. The largest fire was in Pambar reserved forest, but no great damage occurred as the fire confined itself for the most part to the rocky ground and bare grass land above the zig-zags on the ghât road.

In *Tinnevelly* fires occurred in three blocks in two of which the parties charged with the offence of setting fire were acquitted apparently from want of direct evidence to prove the commission of the offence.

In *South Malabar* a fire broke out in the Wálayár reserve in the Pálghat Range and burnt about 217 acres before it could be extinguished. It was supposed to have been the work of a late watcher, but the Ranger and the Police could not bring home the offence to him or any other person. All the coupes felled during the 3 years preceding the year under report suffered more or less, but the coupe felled in 1888-89 in which coppice shoots were only about a year old must have suffered most severely. The occurrence of this fire and the considerable area over which it extended was most disastrous and discreditable to the protective staff.

That the season was on the whole favorable for fire protection may be gathered from the fact that out of an area of 6,524 square miles of *unprotected* forests, 70 per cent. or 4,566 square miles approximately were unburnt.

On the whole, whilst we cannot complain of efforts under which 99 per cent. of the specially protected area has been saved from fire at the average cost of Rs. 10 per square mile for the year, there is room for more systematic, early, and thorough measures in this most important matter and the areas under protection especially in Coimbatore and Salem should be steadily increased.

(d) *Grazing.*

17. There was no change during the year in the policy laid down by Government in regard to grazing; the sanctioned maximum rates were not levied except in a few cases and especially in respect of foreign cattle. Generally half, quarter, and even lower rates were levied, the object being to secure the control over admission of cattle into forest reserves and at the same time to collect a small revenue mainly to cover the cost of such control without pressing hard on the people.

This fact can be gleaned from the figures in the following table.

ABSTRACT J—Grazing and grass collections.

Items.	During 1888-89.			During 1889-90.		
	Number of cattle.	Amount of revenue.	Average rate per head of cattle.	Number of cattle.	Amount of revenue.	Average rate per head of cattle.
1	2	3	4	5	6	7
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
By grazing per head	331,080	48,366	0 2 4	484,541	60,720	0 2 0
By grazing contracts and sale of grass.	..	4,030	..	..	3,655	..
Total ..	331,080	52,396	..	484,541	64,375	..

The reduction of 4 pies in the average rate is due to very low annual rates of 2 annas per buffalo, 1 anna per cow or bullock, and 3 pies per sheep, levied in Salem and some other districts.

There was no abnormal increase in any district. North Coimbatore as usual collected the largest amount in the Circle, Rs. 23,091. Free grazing was also continued in this division as stated in the last annual report. Nevertheless at least 30 per cent. of village cattle not specially exempted from payment have grazed illicitly and without payment. Salem comes next with a revenue of Rs. 12,016. Free grazing was allowed in this district at this rate of 2 head of cattle per acre of land held as enclosure within a forest reserve. South Coimbatore stands third with Rs. 10,341; Chingleput, North Arcot, South Arcot, Trichinopoly and Madura, collected sums ranging between Rs. 2,000 to Rs. 4,500. In North Arcot and Tinnevelly fees were levied for grazing in reserved forests only. In other districts reserved lands were also more or less included in that category, the unclassed forests being under no restriction whatever as to grazing. In Trichinopoly the right of grazing in the Cauvery and Coleroon padugais and plantations was leased out for Rs. 3,222. It is presumed that recently felled coupes were excluded from the lease and cattle rigidly excluded from them. The free cutting and removal of grass was permitted and encouraged wherever possible.

In the matter of sheep and goat grazing the Board of Revenue directed certain specific information being furnished in the form prescribed in its Proceedings, dated 10th March 1890, Forest No. 137; but in view of the remarks of Government in its order, dated 7th May 1890, No. 314, the Conservator has not furnished a consolidated statement of the nature called for by the Board along with the present annual report. The District officers report the total area of waste lands roughly at about 19,500 square miles, the area under no restriction as to grazing at 14,000 and the area in which fees are charged at 5,500 square miles from the bulk of which goats but not sheep are excluded. The Conservator would, however, remark with reference to the Government order above quoted that so far as his experience goes the smooth-haired long-legged sheep known as "shembliadu" in Tamil is almost as much a browser and does as much harm as the goat. He is in fact probably a hybrid or mongrel between a sheep and a goat.

Regarding the hay-making experiment in North Arcot referred to in the last annual report, the Acting District Forest Officer (Mr. Carroll) writes that the attempts made departmentally last year under the Collector's orders did not prove successful, the ryots considering the hay which was given gratis unfit for fodder as their cattle did not readily take to it. It was probably, as remarked by the Collector, inferior grass and not properly treated. A subsequent attempt under which the ryots themselves were permitted to cut the grass and convert it into hay proved more successful. The District Forest Officer states that there was a great demand for it and that the people are willing to continue the experiment which they will be encouraged to do. At the instance of the Commissary-General, Madras, an attempt was made to convert the grass obtainable in some of the reserves in the Walajah range into hay and the work was entrusted to the Range officer. The result was not encouraging, one ton of the hay sent to the Commissariat at St. Thomas' Mount having been unfavorably

reported on. The Range officer (a young and inexperienced Forester) was probably quite ignorant of hay making and the ordinary grasses in the Walajah range are possibly unsuitable for the purpose.

The Conservator is strongly of opinion that much good may be done by encouraging the people to cut and remove the grass under proper supervision and either make hay or ensilage and that no efforts in this direction should be spared. Example is better than precept, and in each district a commencement should be made *on a small scale* by cutting, drying and stacking good grass and allowing neighbouring ryots to use it either gratis or on a nominal payment; neither the people nor the cattle can be expected to change their habits and customs all at once, but much may be done by personal influence and advice on the part of District Forest Officers and Range officers and if we can only provide good sweet hay or ensilage there is no doubt the cattle will eat it readily and thrive on it better than on scanty grazing, whilst the forests will not be overrun by thousands of cattle and hundreds of herdsmen.

On another point connected with grazing the Conservator holds strong views, viz., that no arbitrary rate or tax should be fixed but that when pasturage can be permitted in reserved forests or lands it should be offered for sale, the numbers being limited and the neighbouring cultivators having first choice. If they require it they will readily pay a fair price for it; if they do not some one else will. There will be no compulsory fees and therefore no good ground for complaint, the grazing on unreserved lands being free to all. At present the people are not convinced that we really wish to discourage grazing in reserved forests both in the interests of the forests and the agriculture of the country. They are rather inclined to think we merely wish to make a revenue out of the grazing fees, ignoring the fact that even the maximum rates would scarcely, if ever, compensate for the damage done. They also complain that our reservations are not final and that areas which they were promised should be left unreserved a year or two ago are now notified for reservation. There is some force in this complaint which will, however, gradually disappear when our selections really are complete and the people see that we offer pasturage wherever it is not entirely incompatible with the welfare and proper treatment of the forests.

(e) *Natural Reproduction.*

18. The following notes have been abstracted from the district reports :—

In *Chingleput* the marked improvement in certain reserves in the Tiruvallúr and Chingleput ranges is attributed mainly to the protection from fire during the last 4 or 5 years, closure against grazing, and the durable existence of moisture in those reserves.

The coppice growth in the portion of the Kambakkam forest in the plains which is protected from grazing is also promising, but reproduction from seed attempted during the previous year has not been successful. The babul seeds sown in the fenced portions of the Pulrambakam reserve germinated but were withering from drought.

In *North Arcot* the reproduction of red-sanders (*Pterocarpus santalinus*) and satinwood (*Chloroxylon Swietenia*) is fair in the Napier and Mámandúr reserves (the former under special fire protection since 1880 and the latter since 1874) but is not uniform, owing to the seeding trees of the above species not being evenly distributed. Hence the seedlings are to be found only in patches.

The acha (*Hardwickia binata*) and namai (*Anogeissus latifolia*) in the Chamala reserve under fire protection since 1880 reproduce well from seed but the growth varies according to the nature of the soil. As a rule the above trees are to be found growing together.

In Panapauk and Puduputlabail reserves under protection since 1880, the Acting District Forest Officer reports that *Albizzia stipulata* (probably *amara*) reproduces well from seed; in fact much better than any other kind in those forests.

In the reserves on the Javadis sandalwood (*Santalum album*) seedlings of different ages are to be seen. They grow very luxuriantly under bamboo shade.

Reproduction in open or unprotected forests is not at all encouraging.

In *South Arcot* natural reproduction is on the whole reported to be unsatisfactory owing to want of an adequate staff of watchers to ensure the control of cattle grazing in the reserves.

In *Salem* the stool shoots in three sample acres of Maharajagudai reserve are not thriving and reproduction has been unsatisfactory, apparently because insects damaged the young shoots.

In *Tanjore* the soil in the Tachankurchi reserved forest is reported to be too dry and hard for successful germination of seed.

In *North Coimbatore* the acha (*Hardwickia binata*) which flourishes in all the drier portions of the Kollegál and Bhaváni taluks seeds liberally in February and being light the seeds are blown some distance from the parent tree and well scattered over the whole surface of the ground. When the forest escapes fire even for a single year seedlings come up plentifully but only to perish when the next fires occur. Where the grass is burnt immediately after seeding the seeds are also burnt and no seedlings survive. Fire protection is much needed to ensure better results.

The satinwood (*Chloroxylon Swietenia*) which grows abundantly in all the lower valleys throughout the North Coimbatore division including the eastern slopes of the Nílgiris and the less elevated valleys of the Kollegál and Bhaváni taluks seeds very freely every year and the seed being extremely light is blown great distances by the wind and well dispersed. When the ground is bare of grass seedlings spring up very freely, but when the grass is thick no seedlings come up. Fire protection alone will not therefore help reproduction in this case. The sandal (*Santalum album*) is propagated by birds which swallow the entire fruit and drop the seed under the trees and bushes where they perch. Young sandal plants are to be found in every ravine and thicket in the three sandalwood reserves of Kollegál but they are not so numerous as could be expected after 6 or 7 years of protection of those reserves. This is to a certain extent due to rank undergrowth which does not admit of sufficient light necessary for the young plants. The protection, moreover, has been by no means complete and both fire and cattle have entered repeatedly.

The District Forest Officer, *South Coimbatore*, writes that in regard to natural reproduction and causes of failure in the high forest of his division another year's observation only tends to corroborate the statements made in the last annual report. Mr. Porter finds that there is little or no "advance growth" of teak from seed in the Anamalai forests worked under the Jardinage system and considers that we must stimulate or assist reproduction by clearing away the undergrowth and rank grass which prevent the seeds from germinating or seedlings flourishing and by planting out seedlings from nurseries where necessary. The Conservator agrees with him and experiments in those directions will be undertaken during the current year.

The coppice reproduction in the Sholakarai block of the Bolampatti Forest is admirable. It is also being supplemented by seedling growth of which the following are the numbers counted in compartment A, coupe 4, comprising 33·12 acres felled in 1888:—Teak seedlings 1,973. Rosewood 950. Vengai (*Pterocarpus Marsupium*) 112. 520 of the teak and 419 of the Rosewood seedlings were over 5 feet high.

In *Madura* the reproduction by coppice in the Kadayur block of the Alagar hill reserved forest is satisfactory, but progress of growth is more noticeable up to the end of the third year, when it appears to stagnate. The bare slopes of the Alagar hill are gradually reclothing themselves with vegetation, but although there has doubtless been great improvement the process is not altogether encouraging owing to the rank growth of long grass which cannot easily be removed or destroyed and does not die away. The surface soil has also in many places been entirely washed away after the slopes were denuded of tree growth.

There are parts of the district on the Sirumalais, the Perumalmalai reserve and portions of the Pumbarai-Vilpatti valley reserve for example, where natural repro-

duction is distinctly bad owing partly to the steep and stony nature of the ground and partly to long grass choking all the efforts of seedlings to force their way out.

In *Tinnevelly* portions of the deciduous forests which have been successfully protected from fire for a number of years are now being gradually covered with such vegetation as *Grewia teliæfolia*, *Helicteres isora*, *Zizyphus xylopyra*, &c. Reproduction from seed continues to be good in the moist evergreen forests in the ghâts, but it is very unsatisfactory in deciduous forests which are not under special fire protection or through which fire has passed during recent years. The state of the soil appears to account for this difference and successful reproduction from seed cannot possibly be expected until the surface soil has been transformed from its brick-like composition into a soil of a more friable and spongy nature, capable of retaining moisture for a sufficiently long time to ensure the germination of seed and life of the seedling.

Reproduction by coppice in nearly all the coupes felled on the coppice with standard system is satisfactory. Even there, however, reproduction from seed is unsatisfactory as it is found that teak seedlings although plentiful during and after the north-east monsoon generally die off during the succeeding hot weather. The roots of some of these appear to retain some degree of vitality and throw out fresh shoots during the next rainy season. As such shoots have well developed tap roots they usually withstand the succeeding hot weather unless it be one of exceptional severity.

In *North Malabar* the reproduction of teak (*Tectona grandis*) is visible only from stool shoots and root suckers of seedlings of former years burnt down by the annual fires. Reproduction from seed is entirely absent. The District Forest Officer is inclined to attribute this to the ground being so covered with leaves, &c., as to prevent the seeds reaching it and to the thick growth of the *Helicteres isora*, &c., springing up as soon as the leaf canopy is broken by the felling or natural decay of mature and back going trees. He cannot, however, speak decidedly on the subject, and the Conservator would ascribe the same reasons and remedies as in the case of South Coimbatore (Anamalais).

The reproduction of rosewood (*Dalbergia latifolia*) by seed is fairly good.

The reproduction of vengai (*Pterocarpus marsupium*) is fair at Begur and very good at Chedlet, but it would be better still if more of the seeds could reach the ground. In the case of the *Terminalia tomentosa* (matti) almost every seed is eaten up by the hill squirrel. Two species of monkeys are also very destructive to the seed of this tree.

In short, the character of the forests in Wynaad appears to be gradually changing. Teak, it is apprehended, will be the first species to vanish unless every possible measure is adopted to reproduce it naturally and artificially. *Grewia tiliæfolia* and other inferior trees would take its place.

In *South Malabar* also the absence of teak seedlings is striking in Nellikutta and Karimpoya reserved forests, but one good result of their protection from fire since 1883 appears to be the fair reproduction by seed of benteak (*Lagerströmia microcarpa*) and rosewood (*Dalbergia latifolia*). The seeds of those trees being small germinate soon and take root at once, but in the case of teak the ground appears to be too hard to receive the seeds which are washed away by the heavy rains.

The reproduction from coppice and seed in the Wálayár reserve in Pálghat range is excellent, particularly the reproduction from coppice in all the coupes. Teak forms the greater proportion of the growth, bamboo which predominates being excepted. Success is mainly attributable to fire protection. Chenat Nair reserve has also greatly benefited from successful fire protection during the past 6 years. The good result is apparent from the number of seedlings of *Dalbergia latifolia*, *Xylia dolabrifarmis*, *Pterocarpus marsupium* and other species springing up on every side. The soil is as a rule favorable to the growth of these trees.

In *South Canara* a small casuarina plantation of 7 years growth was carefully cut over close to the ground, but only a small proportion of the stools produced coppice shoots. The failure of the majority might it is said be due to the heat of the surrounding sand and consequent drying up of the bark, but the Conservator is convinced that we cannot rely on reproducing casuarina by coppice. Fair success may be obtained by judicious lopping and pollarding so as to develop shoots or suckers low down on the stem, but this is not coppice proper and the tree is so easily and inexpensively artificially reproduced from seed that that method commends itself as best and most reliable.

(f) *Artificial Reproduction, Regular Plantations, Cultural Operations and Topes.*

19. A comparison of the figures under this head for the past two years shows that better progress was made and a larger area planted at a reduced cost during the year under report than in 1888-89.

ABSTRACT K.—Plantations, topes, and cultural operations in other areas from commencement.

	Up to 1888-89.		Added during 1888-89.		Added during 1889-90.		Total	
	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.
		Rs.		Rs.		Rs.		Rs.
Plantations ..	11,918	6,09,828	+ 149 — 275	25,532	+ 252	25,613	12,044	6,60,973
Topes	18,883	2,94,967	+ 15	5,189	(a)— 10	4,741	18,888	3,04,897
Other areas ..	3,361 and 100 miles of channel banks.	34,639	+ 485	2,093	+ 357	2,302	4,203 and 100 miles of channel banks.	39,034
Total ..	34,162 and 100 miles of channel banks.	9,39,434	+ 649 — 275	32,814	+ 609 — 10	32,656	35,135 and 100 miles of channel banks.	10,04,904

(a) For explanation see remarks in Form No. 61.

In *Chingleput* 12,810 casuarina seedlings were put down in the area felled over in the preceding year, viz., 14 acres in the Meiyur plantation.

The revenue from topes was Rs. 254 as against Rs. 211 in the preceding year.

In *South Arcot* 147,000 casuarina plants were put down in 76 acres at a cost of Rs. 651. The planting was done in a desultory manner and the plantation records were found most incomplete.

In the Cuddalore range an attempt at cultural operations during the year resulted in the production of only 1,630 cashew seedlings. This attempt and those in the Tirukoilúr and Kallakurchi ranges may be considered to have failed chiefly owing to the absence of timely rains.

In *Trichinopoly* about 15 acres of a 74 acre coupe in the Cauvery south bank plantations were replanted with casuarina and *Cassia florida* raised in nurseries; 15 acres of the Coleroon padugais were leased out for three years on the condition that the lessee should stock the area with casuarina in consideration of his being permitted to raise tobacco and plantation crops on the land for his own benefit free of rent. This appears a very doubtful experiment.

About 6 acres of the area felled in the Kolamanikam plantation in the Udayárpálaiyam range were restocked with casuarina plants.

In *Tanjore* 55 acres were dibbled with cashewnuts. About 75 per cent. germinated in 43 acres and the plants were in fairly good condition at close of the year. The result of dibbling over the remaining 12 acres is not reported. A good many pinnai (*Calophyllum inophyllam*) seeds were dibbled in the Méltóttam west block; 80 per cent. germinated and the plants were in good condition.

In *North Coimbatore* 4,978 pits of 1-foot cube were dug in the Bylúr plantation for transplanting divi-divi, mango, jack, &c., plants; 20 seers of arnotto (*Bixa Orellana*) seeds were sown in beds. A water channel was cut 3,411 yards in length and 12 acres of the sandalwood plantation were weeded and thorny bushes, &c., removed and burnt.

In *South Coimbatore* (Tunakadavu No. I Range) 50 acres of bamboo bushes and inferior growth were cleared in a block situated on either side of the road leading to Mount Stuart from the old teak plantation for a distance of about 6 furlongs, but only 7 acres were planted with teak seedlings raised in nurseries, planting in the remaining 43 acres having been unavoidably postponed owing to pressure of other more important works, *e.g.*, tramways, &c. The District Forest Officer proposes to try the experiment of a mixture of teak, rosewood and vengai, as it seems more than probable that such mixture would do better than pure teak. The Conservator concurs in this opinion, but does not consider such areas should be classed under plantations.

In *Madura* the new planting at Gundan shola was extended by about 21 acres. The planting was on the whole successful and season fairly favorable. A large number of casualties due to frost had to be replaced in the previous year's planting.

The Navinipatti garden (tope) at Melúr was placed under charge of Land Revenue Department prior to its disposal by sale.

In *Tinnevelly* the reclamation of the Kudiraimalai teri proceeded as usual and 98,280 palmyra nuts were planted over an area of 150 acres. Also an area of 46 acres (portion being ploughed) was sown by penning several herds of goats and feeding them on *Acacia planifrons* pods. A further area of 36½ acres was planted with nanal grass (*Santarum spontaneum*).

The results of operations on the above areas as well as other smaller ones were not, however, so satisfactory as usual. This was owing to an unfavorable north-east monsoon.

In *North Malabar* the teak plantations at Kanot were weeded, pruned and fire-traced as usual. The trees have improved a good deal in appearance.

The Government cardamom garden at Mukkee and the Mukkee Paya cardamom plantation were weeded and pruned. There was a fair crop in both the estates, but the amount realized was very small owing to market rates for the produce being low.

In *South Malabar* teak planting with mahogany standards sanctioned in 1885, was continued and the fourth block was planted with 152,974 teak and 1,492 mahogany seedlings: 150 acres were cleared but only 140 stocked with teak and mahogany, the remaining 10 acres, not being found suitable for teak, being utilized for planting bamboos: 14,298 teak and 111 mahogany or about 9 per cent. of both died within a few days after planting, but were at once replaced: 21,645 teak and 60 mahogany plants were put down in block No. 3 to replace casualties. In other respects the Acting Conservator found the plants in this block were doing very well. The growth of mahogany is, however, somewhat retarded owing to constant attacks by the borer.

The Acting Conservator obtained a small supply of mahogany (species *macrophylla*) seed from the Royal Botanic Garden, Calcutta, with a view to trying this species at Nilambúr on a large scale, and of the one pound of seed sent to Mr. Hadfield in March last and sown at once according to instructions 600 had already germinated at close of year, and more were expected. The specimen tree in the Chattambarai plantation which has never been attacked by the borer and made such excellent growth is believed to be of this variety. The seedlings now raised will be planted next season as standards amongst teak in the fifth block for which land has already been cleared.

The usual annual operations of weeding, pruning and thinning were carried of satisfactorily.

The following abstract shows the result of enumeration and thinnings carried on during the past 5 years in accordance with a preliminary working scheme drawn up in 1885:—

Name of plantation.	Area in acres operated upon.	Age of growth.	Contents.		
			As fixed for each period by P.W.S.	As ascertained by enumeration.	Difference.
1	2	3	4	5	6
Iravillikava	131·56	33 to 44	13,237	8,189	— 5,048
Edakod	649·05	25 to 43	75,929	90,867	+ 14,938
Ramallore	21·33	37 to 43	2,083	2,585	+ 502
Ellanjeri	337·76	30 to 42	35,100	42,463	+ 7,363
Arivukode	113·63	37 to 39	11,363	14,767	+ 3,404
Mulathu Manna	71·56	34 to 38	7,364	7,841	+ 477
Pannangód	393·71	24 to 34	63,144	62,891	— 253
Amarampalam	408·77	11 to 26	240,646	197,163	— 43,483
Walluva Sheri	584·00	17 to 25	193,696	157,804	— 35,892
Nellikutta	120·23	14 to 15	72,138	72,138	..
Chothambarai	498·10	13 to 15	298,860	203,001	— 95,859
Total ..	3,329·70	..	1,013,560	859,709	— 151,851

Name of plantation.	Capability.			Result of thinnings.	
	As fixed for each period by P.W.S.	As actually worked.	Difference.	Number of trees ought to stand as per P.W.S.	Number of trees actually standing.
	7	8	9	10	11
Iravillikava	1,319	769	— 550	10,918	7,420
Edakod	12,557	21,882	+ 9,325	63,372	68,985
Ramallore	213	575	+ 362	1,870	2,010
Ellanjeri	6,049	10,453	+ 4,404	29,051	32,010
Arivukode	1,136	4,114	+ 2,978	10,227	10,653
Mulathu Manna	715	1,241	+ 526	6,649	6,600
Pannangód	18,610	16,401	— 2,209	44,534	46,490
Amarampalam	75,633	6,949	— 68,684	165,013	190,214
Walluva Sheri	82,279	43,343	— 38,936	111,417	114,461
Nellikutta	24,046	15,108	— 8,938	48,092	57,030
Chothambarai	99,628	33,791	— 65,837	199,232	169,210
Total ..	322,185	154,626	— 167,559	690,375	705,083

It will be observed that although the existing stock and capability were over-estimated, Mr. Hadfield has limited his thinnings accordingly, with the result that the average number of trees now left standing per acre is on the whole fairly correct. A similar scheme for another 5 years' period will be drawn up during the current year.

In *South Canara* the acre felled in the preceding year in Ullal casuarina plantation was re-planted and 6·99 acres of Tannir Bhavi reserve was also planted up. The Acting Conservator during his tour in the district in January last found the growth of casuarina at Tannir Bhavi very fair and the casualties in the year's planting comparatively few.

One acre of casuarina 21 years old was cleared at Ullal. The yield including roots and branches amounted to 143 tons, the average annual acre increment being about $6\frac{3}{4}$ tons as against $5\frac{1}{2}$ tons obtained in the preceding year from an acre of casuarina of 20 years' growth.

(g) *Works of Improvement.*

20. In *Chingleput* the Pulrambakam reserve was fenced by a trench all round.

In *Trichinopoly* clearing of undergrowth and prickly-pear, cutting of creepers, weeding and fencing were carried out in the Cauvery and Coleroon plantations and padugais wherever necessary.

In *North Coimbatore* a fence of mulkiluvai (*Balsamodendr n Berryi*) was erected around the Government tope at Karúr.

Prickly-pear uprooted in the previous year was burnt, and 15 acres are thus cleared of it.

The experiment made in regard to eradicating prickly-pear by means of special machines constructed for the purpose by the late District Forest Officer, Mr. Hayne, does not appear to have proved successful from a financial point of view.

The experiment cost Rs. 3,615 during the past 4 years, and the area cleared is 63 acres, the average cost per acre thus amounting to about Rs. 57, which seems high, considering that the area in question was not *entirely* covered with prickly-pear. This scourge is extending everywhere in the plains of Coimbatore and has even invaded the upland taluks. Unless early and drastic measures are undertaken to restrict its growth, the result of our efforts in the shape of fuel and fodder reserves will be large areas covered with prickly-pear and quite inaccessible to man or beast.

In *South Coimbatore* the coupes felled over in previous years in Sholakarai reserve were cleared by cutting away the inferior growth and creepers around teak, rosewood and vengai seedlings.

In *South Malabar* parasites in the teak plantations were removed as usual.

(h) *Experiments and Exotic Trees.*

21. The report connected with this section will be found printed as an appendix as usual. Results on the whole are satisfactory.

(i) *Communications and Buildings.*

22. A comparison of the figures in the following table will show that progress during the year under this section of works was by no means backward. The budget allotments were nearly worked up to.

ABSTRACT L.—Communications and Buildings.

Description of work.	Cost during 1888-89.	Cost during 1889-90.	Remarks.
	RS.	RS.	
Road and bridge repairs	4,656	(*a*) 6,186	(*a*) Expenditure was heavy in South Coimbatore in connection with the repair of roads and bridges on the ghat-road, tramway lines, &c.
New roads and bridges	11,689	11,653	
Building repairs	4,183	(*b*) 5,740	(*b*) Due to increase in the number of buildings.
New buildings	(*c*) 14,516	11,912	(*c*) The expenditure on Forest Officer's new bungalow at Nilambúr swelled the expenditure during 1888-89.
Other work	584	..	
Repairs and other new works ..	220	446	
Total ..	35,848	35,937	

23. The chief works consisted of—

In *Chingleput* the erection of a rest-house at Nágalápuram which will serve also as a Forester's office, the want of which had been much felt.

In *South Arcot* the construction of $2\frac{1}{4}$ miles of road on the Tenmalai ghât previously traced and widening about $1\frac{7}{8}$ mile of the ghât road constructed in previous years. Also the completion of the Range office building at Kallakurchi.

In *Trichinopoly* the construction of $1\frac{1}{4}$ miles of road for the purpose of connecting the Pachamalais ghât road (lately transferred from Local Fund to our charge with an annual allotment of Rs. 1,000) with the Turaiyur-Atur road in the plains; tracing of three miles of ghât road along the southern and western slopes of the Sengattupatti reserved forest with an average gradient of 1 in 16 and completing the rest-house on the Pachamalais which was in course of construction at close of previous year.

In *North Coimbatore* the restoration of the road (14 miles) from Hassanúr to Bylur, abandoned by the Local Fund Department and neglected for years. The erection of two rest-houses and three tanna huts and improving the Range office building and the Forester's quarters in the Satyamangalam range.

In *South Coimbatore* making of roads for tramway; contribution of Rs. 1,375 towards the construction by the Local Fund Department of 6 miles of road in the Bolampatti valley which is the main source of fuel supply to the Coimbatore town; the construction of half a mile of timber slip in Tunakadavu; and the addition of store godowns to the building at Mount Stuart.

In *Madura* cutting and levelling ghât road over Alagar hill including the construction of tunnels and blasting of rocks, and cutting about one mile of road in Gundan shola; the construction of a Forester's quarters at Gúdalúr, a Range officer's quarters and office at Kodaikánal, a Depôt-keeper's quarters at Gundan shola and a Forester's quarters at Balasamudram.

In *Tinnevelly* the tracing and cutting of a bridle path (8 miles) from Shengalteri to Kariar; construction of a Ranger's rest-house and office at Courtallam, a rest-house at Sivasylum, the Forest officer's bungalow at Mandantorai not completed, and the completion of the rest-house at Kulivilaipil and the Forester's and clerk's house at Kannikotti odai.

In *North Malabar* completion of the Tirunelli forest inspection lodge and out-house attached thereto and construction of two Forest Guards' stations at Kakary and Tirunelli.

In *South Malabar* opening of 2 miles of compartment road with channel in the new teak plantation, Nilambúr range, and 5½ miles of inspection paths and compartment roads in Wálayár, erection of three kalsirambis (raised wooden houses) in the Amarampalam range, *i.e.*, two at Karimpoya and one at Neeratikadava for Foresters and providing the Forest Officer's new bungalow at Nilambúr with a lightning conductor.

Tramways.—The Acting Conservator submitted to the Board of Revenue in March last a special report regarding the cost of working of tramways in North Arcot and South Coimbatore which if the Board approves may be printed as an appendix to this report. The latest accounts from South Coimbatore District Forest Officer show that the tramway is now working well, that bullocks can be utilized for draft and that a saving of Rs. 1-4-0 per candy (12½ cubic feet) will be effected. The acting District Forest Officer, North Arcot, reports that an extra ½ mile of line is required to make the work complete.

CHAPTER V.

YIELD AND WORKING.

24. The total yield during the year as compared with that of the preceding year is shown in the following table:—

ABSTRACT M.—Comparative yield.

Heads.	TIMBER IN CUBIC FEET INCLUDING SANDALWOOD.		FUEL IN CUBIC FEET.		BAMBOOS IN NUMBER.		MINOR PRODUCE—GROSS VALUE IN RUPEES.	
	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.
By Government agency.	165,977	(*a*) 182,315	511,935	(*b*) 867,532	19,521	23,759	67,102	30,100
By purchasers including confiscations	1,266,812	1,663,868	7,779,800	7,039,783	6,183,415	5,470,344	212,782	2,16,950
Free grants	7,824	6,523	640	800	17,154	21,415	..	37
Total ..	1,440,613	1,852,706	8,292,375	7,908,115	6,220,090	5,515,518	279,884	2,47,087
Difference in 1889-90 as compared with 1888-89	..	+ 412,093	..	— 384,260	..	— 704,572	..	— 32,797
Percentages of increase or decrease on the previous year's totals	..	+ 28	..	— 5	..	— 11	..	— 12

(*a*) Includes 1,851 cubic feet, being excess found on re-measurement of timber collected and taken to depôt in previous year.

(*b*) Includes 58 cubic feet, being excess found on re-measurement of fuel collected and taken to depôt in previous year.

The difference between the yield of the two years will be explained under the several heads.

The average approximate yield during the year per square mile of forest area under immediate control amounted to 1,000 cubic feet of timber and fuel, 500 bamboos and 25 rupees worth minor produce.

Section 1.—*Departmental Operations.*

25. The number of trees felled during the year (Form No. 68) as compared with the preceding year is as follows:—

ABSTRACT N.—Trees felled and converted.

Balance brought forward.	Felled in 1888-89.	Felled in 1889-90.	Converted, 1888-89.	Converted, 1889-90.	Balance carried forward.
88	4,438	7,068	4,175	7,117	302

The increase for the year in the number of trees consisted chiefly of about 1,500 casuarinas felled in North Arcot and Trichinopoly for the supply of sleepers and posts to the railway. Several dead and half dead teak, rosewood and vengai trees from the Begur reserved forests in North Malabar were also removed whilst the number worked out in South Coimbatore fell considerably below estimates owing to delay in the completion of the tramway. In Salem 330 sandalwood trees were felled which is a new departure, sandalwood operations in that district having been suspended for several years pending enumeration, &c.

26. The produce collected and disposed of by the department is shown in the following table:—

ABSTRACT O.—Produce collected and disposed of.

Produce collected.	During 1888-89.			During 1889-90.		
	Quantity.	Cost.	Average.	Quantity.	Cost.	Average.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber in cubic feet	164,560	44,831	0 4 4	(a) 179,613	38,538	0 3 5
Fuel in cubic feet	511,935	15,169	0 0 6	(b) 867,532	35,377	0 0 8
Bamboos in number	19,521	198	0 0 2	23,759	298	0 0 2
Sandalwood in cubic feet	1,417	1,411	0 15 11	2,702	2,208	0 13 0
Minor produce in maunds of lb. 25 ..	30,433	34,762	1 2 3	(c) 20,372	19,424	0 15 3
Total ..	..	96,371	..	..	95,845	..

Produce disposed of.	During 1888-89.			During 1889-90.		
	* Quantity.	Sales.	Average.	* Quantity.	Sales.	Average.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber in cubic feet	208,241	128,394	0 9 10	153,726	94,622	0 9 10
Firewood in cubic feet	489,958	45,145	0 1 6	893,889	78,864	0 1 5
Bamboos in number	19,444	1,603	0 1 4	25,318	1,968	0 1 3
Sandalwood in cubic feet	1,657	10,564	6 6 0	2,283	14,115	6 2 11
Minor produce in maunds of lb. 25 ..	34,365	67,102	1 15 3	12,625	30,100	2 6 2
Total ..	..	252,808	..	..	219,669	..

(a) Includes 1,851 found in excess in the depôt.
(b) Do. 58 do. do.
(c) Do. 3 do. do.
* Includes that used departmentally, written off, &c.

The increase in the quantity of timber collected during the year is principally due to the working out of dead teak in North Malabar, thinning out of a larger number of teak saplings from the Nilambúr plantations in South Malabar and extraction on a larger scale of redwood roots in North Arcot in order to save them from decaying or being otherwise destroyed in the forests. The reduction in the average cost for the year is a satisfactory feature.

The increase in the quantity of fuel collected is due to very large demands for it in North Arcot, Trichinopoly and Tanjore from the Railway Department and in Tinnevelly from the Coral Mills Company and Cotton Press Companies at Tuticorin and Virudupati. The small increase in the average cost of collection occurred chiefly in North Arcot where fuel had to be worked out from remoter localities in the forests for supply to railway.

More sandalwood was collected during the year at a less average cost in North Arcot, South Arcot and Salem, partly for sale to a firm (Messrs. Grimault and Co.) in Paris, the roots being for the extraction of oil for medicinal purposes.

The decrease in collection under minor produce has occurred chiefly in South Canara and is apparently due to the season not having turned out so well as was expected. There has been an unaccountable falling off in demand for some articles, notably wild mace. The season of 1888-89 appears to have been exceptionally favourable as explained in the last annual report.

With reference to disposals during the year the unexpected delay in the completion of the tramway in South Coimbatore seriously interfered with the transport of timber to market depôts and consequently affected sales. The demand for dead teak collected in North Malabar appears also to have been slack, as was the case in South Malabar in respect to teak saplings. The market for redwood was also dull and much of the roots collected and stored in the North Arcot depôts had to be held over for sale during the current year. On the whole the sales during the year appear to have been properly regulated and the average rates of the preceding year maintained.

The decrease under minor produce occurred in South Canara as already explained.

There were no indents during the year from the Department of Public Works either for timber or firewood :-354,168 cubic feet of fuel and 2,000 bamboos were supplied to the South Indian Railway, *i.e.*, 158,113 cubic feet from North Arcot and 196,055 cubic feet from Trichinopoly. Besides the above, the former district supplied the Kolar gold mines with 96,423 cubic feet and the Central Jail, Vellore, with 7,007 cubic feet of fuel. The Remount Depôt in Salem was supplied with 1,009 cubic feet of timber and 2,888 bamboos from Salem.

The value of stock balance in depôts was Rs. 44,918 as against Rs. 52,290 at the commencement of the year, showing a reduction of Rs. 7,372.

Section 2.—Removals by Purchasers.

27. The following table shows the removals by purchasers during the year under seignorage permits as compared with the preceding year.

PRODUCE removed by permit-holders (Appendix 72-A).

Produce.	DURING 1888-89.			DURING 1889-90.		
	Quantity.	Amount of sales.	Average.	Quantity.	Amount of sales.	Average.
		RS.	RS. A. P.		RS.	RS. A. P.
Timber .. .. C. ft.	1,259,671	1,12,860	0 1 5	1,648,368	1,50,572	0 1 6
Firewood .. .. ,,	7,766,040	1,77,363	0 0 5	7,030,486	1,85,737	0 0 5
Bamboos .. .. No.	6,175,415	80,314	0 0 2	5,459,249	79,740	0 0 3
Grass and grazing	..	52,331	..	..	64,158	..
Minor produce	..	2,12,297	..	..	2,16,758	..
Total ..	..	6,35,165	..	..	6,96,965	..

The total revenue for the year under this head exceeds that for the preceding year by 9 per cent. and the revised estimate for the year by 13 per cent. Quantities removed as compared with the preceding year shows an increase of 31 per cent. under timber, a decrease of 9 per cent. under fuel and an increase of 12 per cent. under bamboos, the money value showing an increase of 33 per cent., a decrease of 5 per cent. and an increase of 1 per cent. under the three heads, respectively. The differences are apparently due to removal of a larger proportion of higher class timber, green wood for fuel and split bamboos, the seignorage rates in these cases being higher.

The increase under timber accrued chiefly in North Arcot, Salem and Madura, but other districts excepting Chingleput, South Arcot and Malabar also contributed.

The decrease under fuel was chiefly in North Arcot, but owing to the supply of a larger proportion of green wood to railway, &c., the amount of revenue was not materially affected.

There was a considerable increase under minor produce in South Arcot, by the transfer from land revenue of accumulated arrears of tree rents (Rs. 21,076) but it was counterbalanced by a large deficit of Rs. 18,000 in Salem by the transfer of tree rents from Forests to Land Revenue due apparently to a misinterpretation of the orders of the Government of India. The actual loss of forest revenue under tree rents alone in the latter district appears to be upwards of Rs. 30,000, which is counterbalanced by increases under other items, leaving a net falling off in revenue from minor produce of Rs. 18,000. The matter is under reference to the Collector.

349,180 cubic feet of fuel were supplied to Railways (chiefly Madras) under this head.

Confiscated Produce.

28. The confiscated produce sold during the year as compared with the year before shows the following results :—

ABSTRACT P.—Confiscation.

Produce.	During 1888-89.			During 1889-90.		
	Quantity.	Amount realized.	Average.	Quantity.	Amount realized.	Average.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber and Sandalwood .., Cubic feet.	7,141	2,208	0 4 11	15,500	1,572	0 1 7
Firewood .. .. ,,	13,760	660	0 0 9	9,297	636	0 1 1
Bamboo .. .. No.	8,000	380	0 0 9	11,095	275	0 0 4
Minor produce in money value ..	..	485	..	..	192	..
Total ..	..	3,733	..	..	2,675	..

Section 3—Free Grants of Forest Produce.

29. The following exhibits the free grants made by Forest Officers and their value.

ABSTRACT Q.—Free Grants.

District.	Timber.	Firewood.	Bamboos.	Minor produce in money value.	Money value.
	C. FT.	C. FT.	NO.	RS.	RS.
North Arcot	Particulars not available.			..	2,068
South Arcot	..	800	..	..	163
Salem	4,042	..	16,415	..	529
Trichinopoly	1,080	..	..	..	96
North Coimbatore	1,000	..	5,000	..	141
Madura	401	..	..	37	73
Total ..	6,523	800	21,415	37	3,070
Free grants of last year	7,824	640	17,154	4	1,380

The money value given does not include the value of free grazing permitted in reserved areas which must be very large in North Arcot, North Coimbatore, and Tinnevelly.

The only noteworthy items under free grants appear to be the absence of details from North Arcot and the grant under the Collector's sanction of 50 cart-loads of bamboos in North Coimbatore to a Rev. M. Burthon at Audiyur in the Bhavâni taluk. The grant is stated to have been to enable his converts to build houses.

There is no account to show the value of free removals by villagers, &c., of timber, fuel, &c., for domestic and agricultural purposes.

CHAPTER VI.

Financial Results.

30. The revenue and expenditure of the Circle according to appendix No. 64 compare with the actuals of five previous years and with the revised estimate of the year under report as follows:—

Items.	For 1884-85.	For 1885-86.	For 1886-87.	For 1887-88.	For 1888-89.	For 1889-90.	Revised estimate for 1889-90.	The year under report compared with the previous year.	The year under report compared with the revised estimate.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Revenue ..	6,25,492	6,52,318	6,94,535	8,10,197	8,98,086	9,51,017	8,85,000	+ 52,931	+ 66,017
Expenditure A. Conservancy and works.	2,09,344	2,34,006	3,80,192	3,45,742	4,08,269	3,85,586	4,10,000	— 22,683	— 24,414
B. Establishment ..	2,87,579	3,00,608	3,40,529	3,28,981	3,33,863	3,21,442	3,40,000	— 12,421	— 18,558
Total expenditure ..	4,96,923	5,34,614	7,20,721	6,74,723	7,42,132	7,07,028	7,50,000	— 35,104	— 42,972
Net results ..	+1,28,569	+1,17,704	— 26,186	+1,35,474	+1,55,954	+2,43,989	+1,35,000	..	..

The revenue has continued to increase. The surplus of the year amounted to Rs. 88,035 more than that for the preceding year, notwithstanding the large expenditure (Rs. 75,000) on forest surveys. The revenue and expenditure during the year rose by about 5 per cent. as compared with the previous year. The revenue was about 7 per cent. more and the expenditure nearly 6 per cent. less than the revised estimates, but both were closely in accord with the Acting Conservator's estimate before revision by the Board and Government. Towards the cash surplus shown North Arcot contributed 44 per cent., Salem 30 and South Arcot 21 per cent.

31. The working results of the year may be fairly understood from the following:—

		Rs.
Cash surplus of the year as shown above		2,43,989
Add expenditure on live stock, stores, tools, plant and buildings F. No. 73-B		11,907
Do.	on Settlement establishment (B charges) ...	18,307
Do.	on demarcation (VIII-*a*)	13,297
Do.	on acquisition of land and right (VIII-*b*) ...	2,063
Do.	on surveys (VIII-*c*)	75,168
Do.	on law charges (IX-*b*)	222
		3,64,953
Deduct—		
Decrease in outstanding revenue (F. No. 66)		4,420
Increase in outstanding advances (F. No. 65)		1,782
Decrease in value of depôt stock (F. No. 73-A)		7,372
		13,574

The above calculation leaves a balance of Rs. 3,51,379 in favor of the ordinary working account for the year as compared with a similar balance of Rs. 3,20,939 for the preceding year. The financial results and prospects are highly satisfactory and encouraging, but the Conservator would like to see the whole surplus for some years to come devoted to works of permanent improvement and the provision of more adequate and better paid establishments.

CHAPTER VII.

General Remarks.

32. *Forest School.*—The two Rangers (Mr. Thompson and M. Rama Row) deputed to the Forest School in 1888-89 obtained Ranger's certificate with honors and returned in April 1890. One Forester (A. R. Rama Row) was deputed to the school during the year under report.

33. *Conduct of the Establishment.*—One Ranger suspended at the close of the preceding year is still under suspension pending the investigation of the charges against him. Two Foresters were suspended, two reduced to lower grades, and four resigned. There were numerous reductions and dismissals of Forest Guards by District Forest Officers of which there is no record in the Conservator's office. The recruitment of this class of men is most difficult.

Five cases of fraud and misappropriation of Government money chiefly by permit-issuing officers came to light. The individuals concerned were prosecuted and conviction secured.

34. *Health of the Establishment.*—The health of the officers of the superior staff was fairly good. Mr. Morgan had repeated attacks of Wynaad fever and complications resulting from it.

The subordinate staff again suffered severely. There were 15 cases of leave on medical certificate among the Rangers and Foresters for periods varying from 1 to 9 months. One Forester and 6 Forest Guards besides several watchers and other members of the temporary establishment died. In all districts except Chingleput and Tanjore fever was prevalent. It was bad in parts of Coimbatore and the whole of Malabar as usual. The work in Wynaad was in consequence seriously interfered with. Cholera is reported to have prevailed at Pálghat and Calicut.

35. *Service Books.*—Greater progress was made during the year in the verification of service registers and the books of only 16 per cent. of the employés remained unfinished at the close of the year as against 33 per cent. at the end of the preceding year.

36. *Wild elephants.*—One tusker and three cow elephants were captured during the year in the newly purchased Amarampalam forests in South Malabar. One cow elephant was captured in North Malabar and is reported to be doing well.

37. *Administration.*—The Collector of North Arcot (Mr. LeFanu) writes:—

"There is crying necessity for a trained and competent Forest-officer. Although this is a very important district it has, I believe, never been placed under a trained officer, and the result is felt in every direction * * * * * . Ordinary work has been greatly sacrificed to the demands of the forest settlement and I could not in decency press the District Forest Officer, as I knew that his time was fully occupied with the preparation of the reserve notifications, descriptive notices, &c. In the last year increased accuracy and detail have been required of the Forest Department in the matter of settlement work, and the office has been full of work sent back from the Revenue Board to be done over again. This will go on for at least a year to come. Then will come survey, demarcation, &c., and I despair of seeing the District Forest Officer devote himself to the routine of forest work for years to come.

"Our revenue has been flourishing, which makes it the more deplorable that a trained officer, for whom the resources of the district can so well afford to pay, has not been sent. I have myself no desire to stimulate forest revenue, for my feeling is that what the district most wants is rest. In the Mámandúr valley and at Ambúr I am especially desirous to stop felling of all kinds for years to come."

The Collector of Tinnevelly (Mr. H. Tremenheere) considers the management of the forests in that district very creditable, an opinion in which the Conservator fully concurs.

The Collector of South Arcot seems to have reduced the seignorage rates for the branches of all classes of trees when removed as firewood, which would appear to be unnecessary and will be inquired into.

As the Tiruvannámalai (South Arcot) Temple authorities could not agree, and no satisfactory arrangements could be arrived at with them, the offer to hand over the forest to the Temple Committee for management was withdrawn and the amount received on their behalf ordered to be refunded.

All the District Forest Officers and their office and field establishments appear to have worked more or less at high pressure during the year.

Office work has unfortunately greatly increased, in spite of every effort to reduce it. The work in the Conservator's own office has been exceptionally hard, and the greatest praise is due to the Manager and Head Clerk, for the manner in which they have performed it. Simplification of the system of accounts, less writing and better organization of offices of all descriptions appears urgently called for.

APPENDIX.

Details of experiments with exotics during and up to the close of the official year 1889-90.

Carob (*Ceratonia siliqua*).—Of those planted in 1878 by Mr. Morgan in North Coimbatore, two trees survive, the larger of which is about 25 feet high and 1 foot in diameter. Both are in full bearing.

Dates.—Of the date palms raised from seeds specially imported from Busrah in 1886, there are 59 plants in *North Arcot*, varying from 1 to 2½ feet in height. These and others in *South Arcot* and *South Malabar* (Nilambúr) are stated to be healthy.

Of the plants raised from seeds of bazaar date fruits obtained from the west coast (Calicut), those at Bylur in *North Coimbatore*, as a rule, look healthy and vigorous, though planted out far too close to each other. Judging from a good specimen tree (30 feet high) at Hassanur at about the same elevation as Bylur, the climate would appear to suit the dates very well. In *North Malabar* most of the plants alive last year have died. The surviving plants have been transferred to Chedlet. Of the dates sown in *South Canara* in 1888-89 there were 100 in the seed-bed. 64 were transplanted during the monsoon. Of these 34 died; 6 out of the 36 left in the bed have also since died. The survivors both transplanted and otherwise made but little progress. In *Chingleput*, 5 lb. of seed were sown; 165 germinated. Of these 79 died. The surviving plants are 9 inches high and look healthy. The District Forest Officer, Chingleput, had also sown 1 lb. of seed obtained from fruits purchased in the local market; 38 germinated. Of these 7 died. The surviving plants are 1 foot high and look healthy, but the soil and climate are clearly unsuitable.

Of the *Persian dates* (*Phœnix dactylifera*) 10 oz. were sown in *Chingleput* in the preceding year. 20 were reported to have germinated, but all of them died during the year under report. In *South Arcot*, of the 90 per cent. which had germinated, only 29 seedlings, ½ to 1 foot high, now survive. In *Trichinopoly*, 75 seeds were sown, but only 25 per cent. germinated, of which 6 died. In *Tanjore*, 68 seeds were sown; 47 germinated and 36 plants are still alive, but only from 4 to 12 inches high. In *North Malabar*, 10 oz. of seeds were put down. They germinated poorly and only 14 plants survive. In *South Canara* 30 seeds were sown; 25 germinated in about a month. They grew well and were planted out in July and watered once in two days after the rains ceased, but 2 plants have since died.

Of the Egyption dates 12 seeds were sown in *Chingleput*, of which 5 germinated; 1 seedling died and 4 (6 to 9 inches high) are reported to be alive and doing well. In *North Malabar* 9 seeds of two varieties and about 2 oz. of seeds of another variety were sown. Most of them germinated, but only 5 plants survive. In *South Canara*, 15 seeds were sown; 13 germinated in about a month. Four plants have died and others are reported to be flourishing.

Date off-sets.—The results of experiments with the date off-sets obtained from Busrah in 1886-87 are as follows:—

Districts.	Number received and put down in 1886-87.	Number of casualties in 1886-87.	Number of casualties in 1887-88.	Number of casualties in 1888-89.	Number of casualties in 1889-90.	Number existing at the close of 1889-90.	Percentage of casualties during the four years.	Remarks.
Chingleput	113	4	32	12	..	65	42·5	Condition good.
North Arcot ..	100	5	2	..	3	90	10	Height from 4 to 8 feet.
South Arcot	100	5	..	..	..	95	5	Doing well.
Trichinopoly ..	124	4	4	6	7	103	16·9	7 died owing presumably to attacks by white-ants.
Tinnevelly	74	..	43	..	..	31	58·1	
Malabar (Wynaad)..	6	..	1	..	2	3	50	Made no growth whatever.

In *Tanjore*, the 175 plants which survived the planting of 1881 at Vettangudi continue to thrive. 193 off-sets were planted in October 1889 in the south date garden, of which 33 died and the rest are promising.

Divi-divi.—In *North Arcot*, ½ an acre at Kilminnel is stocked with 837 trees, 5 years old, with an average height of 8 feet. The trees have begun to seed. In *North Coimbatore* some seeds which were sown in beds at Tallamalai about the end of December 1883 commenced germinating in January 1884. Sixteen seedlings were transplanted on the 22nd October 1884 and they have now grown 10 to 12 feet high and are about 1 foot in circumference. Their growth is slow.

Eucalyptus.—In *Chingleput*, the several varieties of seeds sown germinated, but the plants subsequently died. In *North Arcot*, a nursery of *E. Resinifera* and *E. Citriodora* was formed at Palmanér. Seeds were sown in boxes and then transplanted into beds at one foot apart on 20th July 1889. The seeds of *Resinifera* which are small were probably washed away by the heavy rain which followed. Seventy-six seeds germinated, but 71 seedlings were destroyed by grass-hoppers. The remaining 5 (one inch high) were transplanted in baskets in September 1889. The seeds of *E. Citriodora* which are larger germinated well within 7 days after sowing. Out of 252 seedlings 9 were destroyed by grass-hoppers and the rest (2 to 3 inches high) were transplanted in baskets in September, but 60 of them have since died. The *E. Resinifera* plants, 6 months old, measured 5 to 10 inches in height, and 9 months old from ½ to 2½ feet, while *E. Citriodora* were 6 to 12 inches high in the sixth month and 1 to 2½ feet in the ninth month. The latter species was attacked by white-ants; the Acting District Forest officer (Mr. Carroll) tried sprinkling with carbolic acid, 1 part to 10 of water, which proved injurious. The plants were then transferred to new baskets which were placed apart from one another and no white-ants appear to have attacked them since. Experiments with 11 other species of *Eucalypti* were also conducted during the year, and all, excepting *E. obliqua*, promise fairly well. The results of these experiments will be given next year. The total number of *Eucalypti* plants in the nursery is 1,721. In *South Arcot*, the 5 plants of *E. tereticornis* which were surviving on 1st April 1889 died during the year, although they were well cared for. In *North Coimbatore* three trees of *E. paniculata*, surviving out of those sown in October 1884, are from 40 to 45 feet in height and 1 to 1½ feet in circumference. In *Tinnevelly*, the *E. rostrata* continue to thrive fairly well on the Pápanásam hills at an elevation of about 3,000 feet. Trees of this species were also planted at a lower elevation (about 1,200 feet) on these hills, but they do not thrive so well. In *North Malabar* (Wynaad) the 5 large trees of *E. Marginata* (called *E. saligna* last year) continue to flourish. The dimensions of the largest trees are—

	As per preceding year's report.		As now reported.	
	Height.	Girth.	Height.	Girth.
	FEET.	FEET.	FEET.	FEET.
No. 1	50	2½	60	3¼
„ 2	42	2⅛	52	2¾
„ 3	35	2 1/12	37	2¼
„ 4	32	2	35	2⅛

All the trees look healthy. There are 20 trees of *E. rostrata* doing well, averaging 45 feet in height and 2½ feet in girth at 4 feet from the ground. There is one fine tree of a third species (not identified by the Acting District Forest officer) growing vigorously; it is 45 feet high with a girth of 2 feet. Of the experiments made with Queensland seeds supplied by the Board of Revenue in 1888-89 the following plants are alive:—

	Number of plants.	Height.	Girth.
		FT. IN.	IN.
Eucalyptus robusta	3	3 2	⅛
Do. Corymbosa	14	7 11	4
Do. Citriodora	¼	8 8	3
Do. Resinifera	3	4 3	3
Do. tereticornis	8	10 5	4½

The result of similar experiments in *South Canara* shows that *E. Resinifera* germinate freely but succumb entirely in a few weeks. *E. tereticornis* promise well at first, but after a few months also succumb suddenly. *E. Citriodora* germinate well and flourish very fairly but are generally exceedingly whippy and delicate, so that transplanting under any adverse circumstances is likely to kill them, but with care they seem likely to live. *E. Corymbosa* do fairly, at first, but while remaining healthy and strong make but little progress, and after 14 months' trial it seems doubtful whether they will finally develop a normal growth or gradually die off. *E. robusta* alone grow in a natural and vigorous manner and promise to succeed like indigenous plants.

Fourcroya.—The plants at Alagarmalai in *Madura* have grown wonderfully well.

Giant Bamboos, &c.—*Dendrocalamus Brandisii* continues to be successful in Wynaad (*North Malabar*). The stems in the largest clump in the experimental garden nursery measure 80 feet in height and 12 inches in girth. There are about 300 clumps which have been planted out and are growing satisfactorily. The rest were destroyed by cattle. Besides these, 700 plants were planted in June 1888 in Koogoorhadi (Kudrakote Forests). These plants are doing fairly well. In Kanot forest all the 34 cuttings made from the existing 5 clumps and planted out are doing well. There are several plants in the nursery which average 7 feet in height with a circumference of 1½ inches at the base.

Four thousand five hundred and ninety-three plants of *Dendrocalamus longispathus* were planted during the year 30 feet apart in the Takals (clearings). Most of them are thriving and throwing out new shoots. They vary in height from 5 to 10 feet and in girth from 1 to 1½ inches. The 63 clumps (5 years old) of this species in the experimental garden continue to flourish The plants in the nurseries at Begur have been put out in Takals. The average height of the plants is 7 feet.

The 13 clumps of *Cephalostachyum pergracile*, referred to in the last report, are still alive, averaging 18 feet in height with a girth of 9 inches to individual culms. 3,000 plants put out in the preceding year in the nurseries at Kanot are growing well. But the majority of those transplanted into the nurseries at Begur look sickly.

Of the 500 plants of *Bresha travancorica* reported to be alive in the Kanot forest in the preceding year, some have been destroyed by cattle The plants are now 12 feet high and their culms average 3 inches in circumference. The 100 clumps in the Experimental Garden at Manantoddy, which were 20 feet high with a girth of 2¾ inches in the preceding year, are now 25 feet high with a girth of 3 inches. The clumps are vigorous and handsome.

The 8 clumps of *Golden Burmah Bamboos* continue to grow vigorously, the tallest shoots of the year averaging 32 feet high with a girth of 10 inches. The clump planted in Kanot in 1886 is now 30 feet high with a girth (of culm) of 8 inches at the base. Twenty-six cuttings made from this species are thriving well.

In short the planting up of Takals with Giant Bamboos in Kanot and Wynaad has been fairly successful

In *South Malabar* (Nilambúr) the *Giant Burmah bamboos* planted along the banks of the rivers and elsewhere in the forests continue to grow splendidly. Out of the plants raised last year, viz, *Bambusa longispathus* and *Cephalostachyum*, half were planted out in Pokate block IV. The remainder will be planted out next season in block V. The large clump of *Yellow Bamboos* and the 4 cuttings raised continue to do well. The District Forest officer does not intend propagating this species of bamboos, as they are too heavy for timber-floating purposes, although very useful for other works.

In *South Canara*, there are 41 clumps of *Dendrocalamus longispatha* doing well at Tannir Bhavi. Some seedlings grown at Kayar Palla did not survive, apparently on account of too much clay in the soil. At Sabladi some half a dozen plants only have been raised. At Uppinangadi 1,145 plants which were ready for transplanting during the monsoon had been successfully put out in the reserved lands on the left bank of the Kennuradari, extending about four miles from a point about five miles above Uppinangadi. The cost of transport, pitting, planting, fencing and watering was Rs. 47, or not quite 8 pies per plant. In October many had culms 6 feet high. 192 were similarly put out from Parapa and were doing well in October. Twelve died since and the rest were flourishing at the end of the year.

Ipecacuanha.—The 2 plants put out in Kanot (*North Malabar*) are stunted and look sickly. But in *South Malabar* (Nilambúr), the 500 plants put down by Mr Lawson in 1888, and the 19 plants planted by the District Forest officer in 1884 are vigorous and healthy.

Kigelia pinnata.—Thirty-eight at Kilminnel and 6 at Tiruvallam in *North Arcot* are doing very well and one of them began to flower during the year. Sixty young shoots have made their appearance, but have not been transplanted.

Lancewood (*Oxandra Virgata*).—Of the 9 plants reported to be alive in *North Malabar* (Wynaad) in the preceding year, 4 have died and the remainder do not promise well.

Mahogany (*Swietenia Mahogani*).—In *Chingleput*, there were 106 seedlings at the beginning of the year, of which 16 died owing to excessive heat, and the rest are promising. In *North Arcot* 17 plants (4 years old) in the Kilminnel plantation are looking well In *South Arcot* there are 176 plants, all of which, excepting those in Tiruvannámalai, are healthy In *Tanjore*, 21 plants were surviving in block No I of Vettangudi at the beginning of the year, of which 4 died during the year and the rest are doing fairly. 24 plants were put out from the nursery at Vettangudi in 1886, of which one died during the year. In the South date garden there were 20 plants, of which 11 died during the year. The average height of the existing plants is 11 feet. In *Tinnevelly* the plants in the Kongaroyakurchi and Kalianur reserves continue to do well. In *North Malabar* (Kanot) of the 120 plants which existed last year, 20 have been destroyed by the attacks of a borer, leaving 100 with an average height of 5 feet with a girth of 3 inches at base. Of the 8 plants put out in No. II plantation, 2 have died. The largest of those surviving (7 years old) is

26 feet high with a girth of 7 inches at the base. All the plants in the experimental garden look sickly and stunted. In *South Malabar* (Nilambúr), the one exceptional tree in Chattambarai, planted in 1873 (which is now believed to be the variety known as *S. Macraphyllum*) measured 75 feet in height, 68 inches girth at base and 52 inches at 5 feet from ground, as compared with 74 feet in height, 64 inches at base and 50 inches at 5 feet from ground as reported last year. The other plants in Irvillikavu, Ramalur and Panangod have, all more or less suffered from the continued attacks of the borer. More seedlings from *Macraphyllum* seed are being reared.

Manilla hemp (*Musa textilis*).—Two plants in *South Arcot* are doing well. Those in *Tinnevelly* are all in a healthy condition and some of them flowered and fruited for the first time during the year. They are now being successfully propagated by means of off-sets. In *North Malabar* (Wynaad), the plant continues to grow luxuriantly.

Olea europæa.—Of the 12 plants potted last year in *North Malabar* (Wynaad), 8 have died. The others do not grow well. They have all suffered very seriously from the attacks of a caterpillar which deprives them of all their leaves.

Peltophorum ferrugineum.—There were 24 plants in *Tanjore* (Meltottam plantation) at the beginning of the year; all are in good condition. Minimum height 9¾ feet, maximum 29 feet and girth from 11 inches to 1 foot; 11 inches at one foot from base.

Pithecolobium Saman is becoming more and more common in *North Arcot* year by year. It grows in any soil. In *South Arcot* there are 144 trees in good condition. Of the 143 trees in *North Malabar* (Wynaad), those in moist places are making fair growth, but those in drier localities are making little or no growth except individual plants whose roots have probably reached a moister sub-stratum. The largest tree is now about 40 feet high with a girth of 3⅓ feet at 4 feet from the ground.

Rubber experiments.—The two trees of *Hevea braziliensis* in the Experimental Garden at Manantoddy (*North Malabar*) grow fairly well. There are a good many Ceara rubber plants in the same garden, the largest tree measuring 38 feet high with a girth of 37 inches at 4 feet from the ground. The largest *Ficus elastica* tree in the garden is 22 feet high with a girth of 16 inches at base. The 190 plants of this species planted in June 1886, now average 5 feet in height with a girth of 4 inches at the base. As the soil is stiff clay, the plants made very little progress. There are also 200 plants (put out in July 1887) living in the Kanot forest. Their average height is 5 feet and girth 3 inches at the base.

In *South Malabar* (Nilambúr) all the different kinds of rubber trees, viz., *Castilloa*, *Hevea braziliensis* and *Ceara* are thriving as well as can be expected. The *Landolphia florida* also continue to do well. Sappan wood (*Cæsalpinia Sappan*), of those planted in 1886 in Kanot (North Malabar) nearly 2,000 are alive. They average 2½ feet in height with a girth of 1 inch at the base. Twenty-five pounds of Sappan seeds were sown in the Takals during the year and have germinated fairly well. The height of these varies from 9 inches to 1 foot, and the circumference is about ¼ of an inch. There are besides a good many plants in the Takals which germinated from the seeds sown in 1887 and 1888.

Silk.—The Special officer's (Mr. Rego, Forest Ranger) report on sericultural operations during 1888-89 was submitted in the year under report, and will be found printed with Board's Proceedings, dated 13th September 1889, No 434 (Settlement, Land Records and Agriculture). The Government decided to make an attempt to rear tassar silk worms and has accordingly sanctioned Rs. 1,000 for expenditure during 1889-90. The Honorable Mr. J. H. Garstin, C.S.I., has personally undertaken the supervision of the experiment and arranged for operations being conducted at Home's Garden, Saidápet, near Madras.

ANNUAL FORM No. 59.

Forest Department, Madras, Southern Circle.

Area of reserved Forests, 1889-90.

District.	Range.	Name of Forest.	AREA ON 1ST APRIL 1889. Acres.	AREA ON 1ST APRIL 1889. Equivalent in square miles.	ADDED DURING THE YEAR. Acres.	EXCLUDED OR TRANSFERRED TO OTHER HEADS. Acres.	AREA ON 31ST MARCH 1890. Acres.	AREA ON 31ST MARCH 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Chingleput.	Saidápet..	Tandrai	664	..	..	..	664	..	....	
	Chingleput.	Tirukalikundram ..	697	..	..	..	697	..	....	
		Uragadam	540	..	..	..	540	..	....	
		Madayatúr	697	..	..	..	697	..	....	
		Vallam	1,328	..	..	..	1,328	..	....	
		Vandalúr	3,207	..	..	..	3,207	..	....	
		Venkatapuram ..	..	..	119	..	119	..	No. 138, 17th May.	
		Gratúr	..	..	312	..	312	..	No. 323, 5th November.	
		Tirutéri	..	..	272	..	272	..	No. 337, 18th November.	
	Tiruvallúr	Kambakam	14,951	..	..	..	14,951	..	....	
		Sattiavédu	6,859	..	..	..	6,859	..	....	
		Ambakam	5,259	..	..	..	5,259	..	....	
		Aradúr	2,680	..	..	..	2,680	..	....	
		Kadúr	2,494	..	..	..	2,494	..	....	
		Ugumudi	2,874	..	..	..	2,874	..	....	
		Allikuli	5,649	..	..	..	5,649	..	....	
		Nagalapuram ..	8,345	..	..	..	8,345	..	....	
		Pulrambakam ..	577	..	..	..	577	..	....	
		Vembedu	1,075	..	..	..	1,075	..	....	
		Alamadi	1,263	..	..	..	1,263	..	....	
		Total ..	59,159	92·44	703	..	59,862	93·54		
North Arcot.	Chittoor..	Paradarami	15,042·88	..	..	..	15,042·88	..	....	
		Pachigunta	..	..	1,800	..	1,800	..	No. 190, 1st July.	
	Chandragiri.	Napier reserve ..	8,772	..	..	..	8,772	..	....	
		Mamandúr do. ..	1,776	..	..	..	1,776	..	....	
		Chamala do. ..	9,600	..	..	..	9,600	..	....	
		Panapak do. ..	6,400	..	..	..	6,400	..	....	
		Pudipatla bail ..	2,560	..	..	..	2,560	..	....	
		Gazulamandiyam ..	250	..	..	..	250	..	....	
	Palmanér.	Musalimadugu ..	9,600	..	..	..	9,600	..	....	
		Basvireddipalle ..	10,240	..	..	..	10,240	..	....	
		Peddúr	9,600	..	..	..	9,600	..	....	
		Palmanér tope ..	2	..	..	..	2	..	....	
		Nagamangalam ..	31	..	..	..	31	..	....	
		Pedugavaripalle ..	20	..	..	..	20	..	....	
		Venkatagirikotta ..	4	..	..	..	4	..	....	
		Byreddipalle	4	..	..	..	4	..	....	
	Palmanér and Gudiyátam.	Mortana	16,000	..	..	..	16,000	..	....	
		Naickaneri	6,400	..	..	..	6,400	..	....	
	Gudiyátam.	Ambúr drug	5,760	..	..	..	5,760	..	....	
		Tiruvallam plantation.	435	..	..	..	435	..	....	
		Virinjipuram ..	260	..	..	..	260	..	....	
		Cheynúr tope ..	129·98	..	..	..	129·98	..	....	
		Amundi plantation ..	160	..	..	..	160	..	....	
		Tandrayagunta tope.	2	..	..	..	2	..	....	
		Vikramasi	..	..	161	..	161	..	No. 144, 21st May.	
	Vellore ..	Ambúr fuel reserve ..	3,840	..	..	..	3,840	..	....	
		Palamadi	6,400	..	..	..	6,400	..	....	
		Ambúr tope	5	..	..	..	5	..	....	
	Pólúr ..	Carnatic Ghúr ..	7,069·17	..	..	..	7,069·17	..	....	
		Ammerdi plantation..	25	..	..	..	25	..	....	
	Vellore and Pólúr.	Tellai	15,121·01	..	..	..	15,121	..	....	
	Javadis ..	Puttúr..	12,800	..	..	..	12,800	..	....	
		Patrakad	19,200	..	..	..	19,200	..	....	
		Virappanúr	64,000	..	..	..	64,000	..	....	
	Arcot ..	Pungamúr	3,743·37	..	..	..	3,743·37	..	....	
		Kilminnel plantation.	150	..	..	..	150	..	....	
		Sennaléri	..	..	1,675	..	1,675	..	No. 196, 6th July.	

Area of reserved Forests, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
North Arcot—*cont.*	Walájápet.	Vannivédu plantation.	30	..	..	..	30	..	....	
		Arkónam Sub-Magistrate's compound.	5	..	..	..	5	..	....	
		Arkónam tope ..	37	..	..	..	37	..	....	
		Gudalúr	..	..	535	..	535	..	No. 42, 11th February.	
		Anantapuram or Uriúr.	..	..	540	..	540	..	No. 43, 11th February.	
		Ammanúr	..	..	203	..	203	..	No. 44, 11th February.	
	Wandiwash.	Brammakatéri ..	635·01	..	..	..	635·01	..	....	
		Total ..	236,109·42	368·92	4,914	..	241,023·42	376·60		
South Arcot.	No. I, Tiruvannamalai.	Annamalai	1,760	..	* 880	..	2,640	..	....	* Result of correction.
		Chinnasamudram ..	6,018·81	..	..	* 2,249·81	3,769	..	....	
		Mudenai	4,000·33	..	* 2,463·67	..	6,464	..	....	
		Perungolatúr Swamimalai.	9,000	..	* 312	..	9,312	..	....	
		Anandavadi	6,000	..	* 2,672	..	8,672	..	....	
		Kavuttumalai ..	6,000·33	..	* 4,031·67	..	10,032	..	....	
		Tippakadu	6,001·42	..	..	* 1,457·42	4,544	..	....	
		Siruvadi	3,335·31	..	* 1,272·69	..	4,608	..	....	
		Muttakadu	3,094·76	..	* 958·24	..	4,053	..	....	
		Karai	1,345·65	..	* 351·35	..	1,697	..	....	
		Kurumbaram, second bit.	150	..	* 42	..	192	..	....	
		Kumalampatti ..	1,221·74	..	..	* 20·74	1,201	..	....	
		Sevur	1,207·74	..	..	* 7·74	1,200	..	....	
	No. II, Tindivanam.	Venmaniyattúr or Bomnatur.	302·14	..	* 183·86	..	486	..	....	
		Saram	251·03	..	..	* 8·03	243	..	....	
		Salavadi	70	..	..	* 6	64	..	....	
		Jakkampettai ..	300·16	..	..	* ·16	300	..	....	
		Agaram	601·20	..	..	* 1·20	600	..	....	
		Merkanam	80·60	..	..	* ·60	80	..	....	
		Adikuppam	150	..	..	..	150	..	....	
		Ashikadu	450	..	..	..	450	..	....	
	No. III, Villupuram.	Gangavaram	8,740	..	* 4,536	..	13,276	..	....	
		Nabob's tope	..	..	70	..	70	..	No. 334, 18th November.	
		Adanúr	..	..	1,491	..	1,491	..	No. 21, 20th December.	
	No. IV, Cuddalore.	Sammattikuppam ..	..	..	364	..	364	..	No. 8, 23rd December.	
		Vadakottai, third bit or Marangur.	..	..	224	..	224	..	No. 164, 10th June.	
		Total ..	60,081·22	93·88	19,852·48	3,751·70	76,182	119·03		
Salem.	Salem ..	Bodamalai	5,600	..	..	..	5,600	..	....	
		Atúr ghât	3,142	..	..	..	3,142	..	....	
		Nartanchedu	2,400	..	..	..	2,400	..	....	
		Yaniyar	4,512	..	..	..	4,512	..	....	
		Kutar	3,795	..	..	..	3,795	..	....	
		Manjavadi ghât ..	8,461	..	..	..	8,461	..	....	
		Ajjampatti	1,920	..	..	..	1,920	..	....	
		Nartanchedu extension.	1,088	..	..	..	1,088	..	....	
		Yerimalai	3,520	..	..	..	3,520	..	....	
		Kanavoipudúr ..	3,200	..	..	..	3,200	..	....	
		Lokúr	5,312	..	..	..	5,312	..	....	
		Pillapallikombai, new.	2,080	..	..	..	2,080	..	....	
		Atúr ghât extension ..	544	..	..	..	544	..	....	
		Kanjeri, new ..	4,032	..	..	..	4,032	..	....	
		Pannikaradu ..	4,832	..	..	..	4,832	..	....	
		Mallápuram ..	589	..	..	..	589	..	....	
		Karavattuparai ..	1,800	..	..	..	1,800	..	....	
		Gundakal	..	..	4,000	..	4,000	..	No. 229, 30th July.	

Area of reserved Forests, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Salem—*cont.*	Salem—*cont.*	Manakondamalai ..	..	..	5,500	..	5,500	..	No. 233, 30th July.	
		Godumalai	..	..	7,000	..	7,000	..	No. 206, 15th July.	
		Jalluttu	..	..	12,000	..	12,000	..	No. 232, 30th July.	
	Atár ..	Varagúr	2,675	..	..	..	2,675	..	....	
		Nayaken kombai ..	2,880	..	..	..	2,880	..	....	
		Bylúr	6,880	..	..	..	6,880	..	....	
		Nagúr	3,757	..	..	..	3,757	..	....	
	Námakal.	Jambuttu	2,617	..	..	..	2,617	..	....	
		Puliyanshola	5,530	..	..	..	5,530	..	....	
	Atúr and Námakal	Karavalli kombai ..	8,755	..	..	..	8,755	..	....	
	Uttankarai.	Pallipatti	3,000	..	..	..	3,000	..	....	
		Thambakal	7,757	..	..	..	7,757	..	....	
		Chitteri	3,917	..	..	..	3,917	..	....	
		Chittilingi	6,880	..	..	..	6,880	..	....	
		Kottapatti	8,960	..	..	..	8,960	..	....	
		Puvampatti	4,672	..	..	..	4,672	..	....	
		Singarapet	2,624	..	..	..	2,624	..	....	
		Mallápuram extension	400	..	..	..	400	..	....	
	Tirupatúr.	Mangalam	6,080	..	..	..	6,080	..	....	
		Nagaluttu	2,560	..	..	..	2,560	..	....	
		Mambakam	9,370	..	..	..	9,370	..	....	
		Pungolam	7,834	..	..	..	7,834	..	....	
		Madukadappu ..	2,048	..	..	..	2,048	..	....	
		Jalárpet	1,216	..	..	..	1,216	..	....	
		Narasingapuram ..	2,048	..	..	..	2,048	..	....	
		Kalarapatti	2,016	..	..	..	2,016	..	....	
		Alangayam	11,520	..	..	..	11,520	..	....	
	Tirupatúr and Uttankarai.	Singarapet extension	7,398	..	..	..	7,398	..	....	
	Tirupatúr and Krishnagiri.	Kotúr	3,840	..	..	..	3,840	..	....	
	Hosúr ..	Ayyúr	5,952	..	..	..	5,952	..	....	
		Marandahalle ..	5,824	..	..	..	5,824	..	....	
		Gulhatti, new ..	7,942	..	..	..	7,942	..	....	
		Manchi, new	5,632	..	..	..	5,632	..	....	
		Jowlagiri	6,016	..	..	..	6,016	..	....	
		Talli	6,368	..	..	..	6,368	..	....	
		Naganúr	3,200	..	..	..	3,200	..	....	
		Denkanikotta ..	2,816	..	..	..	2,816	..	....	
		Toluvabetta	6,918	..	..	..	6,918	..	....	
		Anchetti	8,832	..	..	..	8,832	..	....	
		Natrapalaiyam ..	10,880	..	..	..	10,880	..	....	
		Biligundla	14,272	..	..	..	14,272	..	....	
		Kestúr	11,616	..	..	..	11,616	..	....	
		Billikal	11,136	..	..	..	11,136	..	....	
		Mallahalli	8,928	..	..	..	8,928	..	....	
		Taggatti	10,432	..	..	..	10,432	..	....	
	Dharmapuri.	Pennagaram	10,304	..	..	..	10,304	..	....	
		Mórappúr	16,640	..	..	..	16,640	..	....	
	Hosúr and Dharmapuri.	Woddapatti	17,152	..	..	..	17,152	..	....	
		Gutirayen	15,776	..	..	..	15,776	..	....	
	Krishnagiri.	Bargur, new	1,920	..	..	..	1,920	..	....	
		Togarapalli	901	..	..	..	901	..	....	
	Tiruchengód.	Pakkanád	4,500	..	..	..	4,500	..	....	
		Total ..	383,018	598·47	28,500	..	411,518	643·00		
Trichinopoly.	Trichinopoly.	Tuvakudi	1,438	..	..	..	1,438	..	....	
	Kulitalai..	Elamanúr	117·10	..	..	..	117·10	..	....	
		Pettuvoitalai	137	..	..	..	137	..	....	
		Kulitalai	77·18	..	..	..	77·18	..	....	
		Manatattai	44·86	..	..	..	44·86	..	....	
		Lalapet	268·20	..	..	..	268·20	..	....	

Area of reserved Forests, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Trichinopoly—*cont.*	Kulitalai —*cont.*	Sittalavoi	160·32	..	..	..	160·32	..	....	
		Kattalai	74·35	..	..	..	74·35	..	....	
		Tainimalai	464	..	..	..	464	..	....	
		Minnakaradu ..	98	..	..	..	98	..	....	
		Panjantangi	1,543	..	..	..	1,543	..	....	
		Veeramalai Hills ..	5,471·98	..	..	..	5,471·98	..	....	
		Poyapatti Hills ..	639	..	..	..	639	..	....	
		No. 1. Shemmalai ..	2,476·56	..	..	..	2,476·56	..	....	
		Pakkirikaradu ..	65	..	..	..	65	..	....	
		Puttanatam range comprising Kurumalai, Palamalai and Nadumalai.	705·25	..	..	..	705·25	..	....	
		Surpam range ..	1,402·95	..	..	..	1,402·95	..	....	
		Mathalamalai ..	465·25	..	..	..	465·25	..	....	
	Musiri ..	Sengattupatti ..	3,000	..	..	..	3,000	..	....	
		Melúr	3,000	..	..	..	3,000	..	....	
		Kaliyammankovil tittu.	1,500	..	..	..	1,500	..	....	
		Karuppankadu tittu..	2,000	..	..	..	2,000	..	....	
		Kanapadikannimar solai.	2,560	..	..	..	2,560	..	....	
		Kanapaditempernad.	12,000	..	..	..	12,000	..	....	
		Palamalai	10,000	..	..	..	10,000	..	....	
	Perambalúr.	Manalodai	4,000	..	..	..	4,000	..	....	
		Salamatti	7,000	..	..	..	7,000	..	....	
		Selaiyúr	1,600	..	..	..	1,600	..	....	
		Puliyúr	10,000	..	..	..	10,000	..	....	
		Semmalai	5,000	..	..	..	5,000	..	....	
		Sengattúr	10,000	..	..	..	10,000	..	....	
	Udayárpálaiyam.	Adanakurichi.. ..	..	..	250	..	250	..	No. 195, 6th July.	
		Malanganku diyiruppu	..	..	150	..	150	..	No. 199, 6th July.	
		Total ..	87,308	136·42	400	..	87,708	137·05		
Tanjore.	Southern.	Block No. 2, Meltottam, eastern block.	10	..	..	..	10	..	....	
		Block No. 2, Meltottam, western block.	8	..	..	..	8	..	....	
		Manakádu	120	..	..	..	120	..	....	
		Talanayár	2,000	..	..	..	2,000	..	....	
		Tillaivilagam ..	320	..	..	..	320	..	....	
		Nadur No. 2	200	..	..	..	200	..	....	
		Tachankurichi ..	320	..	..	..	320	..	....	
		Veralipatti, north block.	145	..	..	..	145	..	....	
		Veralipatti, south block.	234	..	..	..	234	..	....	
		Kallupatti	85	..	..	..	85	..	....	
		Kollangarai	458	..	..	..	458	..	....	
		Puttúr No. I ..	191	..	..	..	191	..	....	
		Nadur ,, I ..	..	..	1,000	..	1,000	..	No. 110, 20th April.	
		Puttúr ,, II ..	119	..	..	..	119	..	....	
	Northern.	Northern casuarina ..	350	..	..	..	350	..	....	
		Southern do. ..	250	..	..	..	250	..	....	
		Neduvasal	42	..	..	..	42	..	....	
		Total ..	4,852	7·58	1,000	..	5,852	9·14		
North Coimbatore.	Kollegál..	Jadatalabulla ..	361·01	..	..	..	361·01	..		
		Udayárpálaiyam ..	296·63	..	..	..	296·63	..	....	
		Bailúr	1,186·39	..	..	..	1,186·39	..	....	
	Satyamangalam.	Germalam	519·78	..	..	..	519·78	..	....	
		Vellamundi	12,800	..	..	..	12,800	..	....	
		Eastern slopes of Nilgiris.	60,800	..	..	..	60,800	..	....	
									....	
		Total ..	75,963·81	118·69	..	..	75,963·81	118·69		

Area of reserved Forests, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
South Coimbatore.	No. I Tunakadavu.	Anaimalai No. I ..	* 52,480	..	..	..	* 52,480	..	....	* Includes Tekadi leased Forests of 26 square miles.
	No. III Punachi.	Do. II ..	3,140	..	..	..	3,140	..	....	
	No. IV Udamalpet.	Do. III ..	47,360	..	..	..	47,360	..	....	
	No. II Polláchi and IV Udamalpet.	Anaimalais	133,120	..	..	..	133,120	..	....	
	No. VII Bolampatti.	Bolampatti block No. I. Bolampatti block No. II. Bolampatti block No. III.	47,680	..	..	..	47,680	..	....	
		Tadagam No. IV ..	30,720	..	..	..	30,720	..	....	
	No. VI Mettupálaiyam.	Gopanéri .. No. V								
		Kempampalaiyam ,, VI	38,200	..	..	..	38,200	..	....	
		Nellitorai No. VII								
		Odantorai ,, VIII	5,880	..	..	..	5,880	..	....	
		Modúr ,, IX	3,600	..	..	..	3,600	..	....	
	No. VIII Sholakarai.	Small Sholakarai reserve.	..	..	81	..	81	..	No. 167, 17th June.	
		Total ..	362,180	565·91	81	..	362,261	566·03		
Madura.	Uttamapalaiyam or No. I.	Vannatiparai ..	27,481·6	..	..	..	27,481·6	..	....	
		Suranganar	3,616	..	..	..	3,616	..	....	
		Melajudalúr	1,280	..	..	..	1,280	..	....	
		Machakal	2,560	..	..	..	2,560	..	....	
		Kuttinachiyar ..	640	..	..	..	640	..	....	
		Pandaratorai ..	300	..	..	..	300	..	....	
		Surulipatti	5,760	..	..	..	5,760	..	....	
		Tambirankanal ..	250	..	..	..	250	..	....	
		Jungle Conservancy.								
	Palni Hill or No. II.	Pambar	4,755·2	..	..	..	4,755·2	..	....	
		Sengalvarai ár ..	5,209·6	..	..	..	5,209·6	..	....	
		Pumbarai Vilpatti valley.	13,587·2	..	..	..	13,587·2	..	....	
		Kudirai ár	10,060·8	..	..	..	10,060·8	..	....	
		Kukkal	9,644·8	..	..	..	9,644·8	..	....	
		Marudanadi ár ..	6,528	..	..	..	6,528	..	....	
		Pambukal ár	800	..	..	..	800	..	....	
		Siruvattukádu ..	2,279·2	..	..	..	2,279·2	..	....	
		Kaniyankadu ..	3,001·6	..	..	..	3,001·6	..	....	
		Oliyanutu odai ..	3,200	..	..	..	3,200	..	....	
		Kadugatadikadu ..	1,280	..	..	..	1,280	..	....	
		Vennilai	4,800	..	..	..	4,800	..	....	
		Ariyanutukanal ..	64	..	..	..	64	..	....	
		Kumangovaimalai kadu.	80	..	..	..	80	..	....	
		Peterankanal ..	80	..	..	..	80	..	....	
		Varattarkanal ..	200	..	..	..	200	..	....	
		Iruttarkanal ..	100	..	..	..	100	..	....	
		Nochiyar kadu ..	200	..	..	..	200	..	....	
		Talaiyar andal kovil kadu.	30	..	..	..	30	..	....	
		Talaiar kadu	150	..	..	..	150	..	....	
		Kadamaravu	50	..	..	..	50	..	....	
		Velam kombai ..	1,600	..	..	..	1,600	..	....	
		Arunkanal	..	..	2,560	..	2,560	..	No. 205, 20th July.	
		Kallar	..	..	9,600	..	9,600	..	No. 217, 24th July.	

Area of reserved Forests, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Madura—*cont.*	Palni Hill or No. II—*cont.*	*Sholas on the Lower Palnis.*								
		(*a*) Permalmalai shola.								
		(*b*) Togavarai shola.								
		(*c*) Siruttarkanal ..								
		(*d*) Arankanal ..								
		(*e*) Kadavu shola ..								
		Sholas on the Upper Palnis.								
		(*a*) Tiger shola ..	2,316	..	..	..	2,316	..	....	
		(*b*) Parappar shola.								
		(*c*) Kodaikánal ..								
		(*d*) Pannituttan-kanal.								
		(*e*) Gunden and Manavan sholas								
		(*f*) Gunden shola.								
		(*g*) Sandanam shola								
		(*h*) Fort Hamilton.								
		(*i*) Mariyan shola ..								
		Plantations,								
	Dindigul or No. III.	Eucalyptus	16·62	..	..	..	16·62	..	....	
		Velamkombai ..	54·14	..	..	..	54·14	..	....	
		Pumbaraj	6	..	..	..	6	..	....	
		Amburivi	3,840	..	..	..	3,840	..	....	
		Perumalmalai ..	12,800	..	..	..	12,800	..	....	
		Sirumalai	25,529·6	..	..	..	25,529 6	..	....	
		Mudimalai	6,086·4	..	..	..	6,086·4	..	....	
		Akkamakaradu ..	1,600	..	..	..	1,600	..	....	
		Kappuravalli kuttu ..	2,560	..	..	..	2,560	..	....	
		Tenkal	3,200	..	..	..	3,200	..	....	
		Sundamalai	2,240	..	..	..	2,240	..	....	
		Tannirkaradu ..	1,920	..	..	..	1,920	..	....	
		Kadavakurichi ..	5,120	..	..	..	5,120	..	....	
		Sengattampatti ..	4,480	..	..	..	4,480	..	....	
		Buthakudimalai ..	..	..	1,600	..	1,600	..	No. 204, 19th July.	
		Alagarmalai	17,510·24	..	..	..	17,510·24	..	....	
		Vikramangalam ..	10,240	..	..	..	10,240	..	....	
		Total ..	209,107	326·73	13,760	..	222,867	348·23		
Tinnevelly.	Nángunéri	Reserve No. I ..	31,532·80	..	..	..	31,532·80	..	....	
		Teak tract	..	..	284·26	..	284·26	..	No. 165, 10th June.	
	Ambásamudram.	Reserve No. II ..	91,008	..	..	..	91,008	..	....	
		Mullimalai	..	..	457·10	..	457·10	..	No. 307, 24th October. No. 75, 11th February.	
		Kaliyammankovil-parai.	..	..	309·33	..	309·33	..	No. 308, 24th October.	
		Koviladiparai ..	..	..	124·38	..	124·38	..	No. 309, 24th October.	
		Saluparpathai ..	..	..	70·72	..	70·72	..	No. 310, 24th October.	
	Tenkási ..	Reserve No. III ..	18,009·60	..	..	..	18,009·60	..	....	
		Okaninranpathai ..	..	..	84·76	..	84·76	..	No. 198, 6th July.	
		Kavalkattiperamba ..	..	..	374·60	..	374·60	..	No. 303, 24th October.	
		Kottamalai	..	..	859·83	..	859·83	..	No. 304, 24th October.	
		Nalankurichi ..	..	..	212·37	..	212·37	..	No. 305, 24th October.	

Area of reserved Forests, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Tinnevelly—*cont.*	Sankaranainárkoil.	Reserve No. IV ..	19,737·60	..	..	..	19,737·60	..	....	
	Srívilliputur.	Reserve No. V ..	23,270·40	..	..	..	23,270·40	..	....	
		Unnipattimalai ..	..	..	529·79	..	529·79	..	No. 230, 30th July.	
		Sappaniperambu ..	..	..	375·90	..	375·90	..	No. 311, 24th October.	
		Pulpadiperambu ..	..	..	50·70	..	50·70	..	No. 312, 24th October.	
		Martandamparai ..	..	..	134·51	..	134·51	..	No. 313, 24th October.	
	Tenkarai.	Pannamparai ..	..	..	116·60	..	116·60	..	No. 111, 20th April.	
		Kaliyavúr	..	..	158·07	..	158·07	..	No. 197, 6th July.	
		Kottamadukkikadu ..	..	..	1,279·23	..	1,279·23	..	No. 306, 24th October.	
		Total ..	183,558·40	286·81	5,422·15	..	188,980·55	295·28		
		Ernád taluk.								
North Malabar.	Chedlet reserved Forest.	Kuppadi	7,337·44	..	..	..	7,337·44	..	....	
		Kurchiyat	18,053·86	..	..	..	18,053·86	..	....	
		Rampur	18,854·67	..	..	..	18,854·67	..	....	
	Trans Beni.	Nalpoya	3,613·28	..	..	..	3,613·28	..	....	
		Mavanhulla	12,576·64	..	..	..	12,576·64	..	....	
		Begur	15,366	..	..	..	15,366	..	....	
		Total ..	75,801·89	118·44	..	..	75,801·89	118·44		
South Malabar.	Nilambúr.	Amarampalaiyam ..	468·04	..	..	..	468·04	..	....	Leased Forests.
		Chatambarai	699·52	..	..	..	699·52	..	....	Do.
	Amarampalaiyam	Karimpoya	3,955·28	..	..	..	3,955·28	..	....	Do.
		Nellikutta	1,824·13	..	..	..	1,824·13	..	....	Do.
	Pálghat ..	Wálayár	3,017·00	..	..	..	3,017·00	..	....	Purchased outright.
		Chenat nair	15,203·00	..	..	..	15,203·00	..	....	Escheat lands.
		Total ..	25,166·97	39·32	..	..	25,166·97	39·32		
South Canara.	Kondapur.	No. I, Sabladi ..	208	..	..	..	208	..	....	
		,, II, Ajjarkadu ..	160	..	..	..	160	..	....	
		,, III, Pillarkhan ..	320	..	..	..	320	..	....	
		,, VI, Manajikadu.	422·73	..	..	..	422·73	..	....	
		,, VIII, Chinkramalle.	2,560	..	..	..	2,560	..	....	
		,, XIV, Durgamalai.	..	..	1,601·24	..	1,601·24	..	No. 362, 28th November.	
	Mangalore.	Nos. IV and V, Poitaji and Kayarpalli.	96	..	..	..	96	..	....	
		No. V, Ullal casuarina and Honne plantations	57·11	..	..	..	57·11	..	....	
		,, VI, Chembugudde.	75	..	..	..	75	..	....	
		,, VII, Kutiyar ..	25	..	..	..	25	..	....	
		,, X, Tannir Bavi.	69·99	..	..	..	69·99	..	....	
		,, XII, Hosabetta ..	376·01	..	..	..	376·01	..	....	
	Uppinangadi.	No. I, The Siradisisla reserve.	19,200	..	..	..	19,200	..	....	
		,, IV, Bhagimalai ..	6,400	..	..	..	6,400	..	....	
		Total ..	29,969·84	46·82	1,601·24	..	31,571·08	49·33		
		Grand Total ..	1,792,275·55	2,800·43	76,233·87	3,751·70	1,864,757·72	2,913·68		

Abstract.

District.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
Chingleput	59,159	92·44	703	..	59,862	93·54
North Arcot	236,109·42	368·92	4,914	..	241,023·42	376·60
South Arcot	60,081·22	93·88	19,852·48	3,751·70	76,182	119·03
Salem	383,018	598·47	28,500	..	411,518	643·00
Trichinopoly	87,308	136·42	400	..	87,708	137·05
Tanjore	4,852	7·58	1,000	..	5,852	9 14
North Coimbatore	75,963·81	118·69	..	..	75,963·81	118·69
South Coimbatore	362,180	565·91	81	..	362,261	566·03
Madura	209,107	326·73	13,760	..	222,867	348·23
Tinnevelly	183,558·40	286·81	5,422·15	..	188,980·55	295·28
North Malabar	75,801·89	118·44	..	..	75,801·89	118·44
South Malabar	25,166·97	39.32	..	..	25,166·97	39·32
South Canara	29,969·84	46·82	1,601·24	..	31,571·08	49·33
Total ..	1,792,275·55	2,800·43	76,233·87	3,751·70	1,864,757·72	2,913·68

Annual Form No. 59.

Forest Department, Madras, Southern Circle.

Area of Reserved Lands, 1889-90.

District.	Range.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Chingleput.	Tiruvallúr	Palavakam	2,511	..	..	..	2,511	..	....	
		Mylapur	926	..	4	..	930	..	....	Added at settlement.
		Attantangal	..	..	268	..	268	..	No. 46, 21st Jan.	
		Nayar	..	..	300	..	300	..	,, 14, 20th Dec.	
		Erumaivettipalaiyam.	..	..	555	..	555	..	,, 16, ,, ,,	New areas.
		Kavalúr	..	..	240	..	240	..	,, 17, ,, ,,	
		Manali	..	..	1,485	..	1,485	..	,, 12, ,, ,,	
		Nemali	633	..	..	..	633	..	....	
		Alapakam	486	..	..	..	486	..	....	
		Kuttrambakam A ..	121	..	5	..	126	..	....	Added at settlement.
		Do. B ..	211	..	..	6	205	..	....	Excluded at settlement.
		Puduppúr	376	..	..	1	375	..	....	
		Mannúr	570	..	..	..	570	..	....	
		Nallúr	937	..	..	..	937	..	....	
		Maganiyam	942	..	4	..	946	..	....	Added at settlement.
		Kalvayi	139	..	..	1	138	..	....	Excluded at settlement.
		Kolattúr	1,899	..	10	..	1,909	..	....	Added at settlement.
		Kayar	643	..	..	1	642	..	....	Excluded at settlement.
		Sonallúr	1,119	..	..	12	1,107	..	....	
		Venkatapuram ..	119	..	..	119	..	..	No. 138, 17th May	Transferred to reserved forests.
		Tirutteri	272	..	..	272	..	..	,, 337, 18th Nov.	
		Orattúr	312	..	..	312	..	..	,, 323, 5th ,,	
		Anjúr	1,507	..	7	..	1,514	..	....	Added at settlement.
		Tirumani	639	..	..	..	639	..	....	
		Gúdalúr	2,744	..	..	..	2,744	..	....	
		Senkundram	1,236	..	..	4	1,232	..	....	Excluded at settlement.
		Kolatúr *alias* Appur ..	1,441	..	8	..	1,449	..	....	Added at settlement.
		Paranúr	378	..	..	..	378	..	....	
		Kotankolatur ..	537	..	..	2	535	..	....	Excluded at settlement.
		Kavanur	568	..	1	..	569	..	....	Added at settlement.
		Siruvanjúr	465	..	..	..	465	..	....	
		Vattambakam ..	694	..	..	..	694	..	....	
	Chingleput.	Vadakkupattu ..	728	..	67	..	795	..	....	Added at settlement.
		Taiyúr	1,084	..	..	..	1,084	..	....	
		Mambakam	766	..	..	..	766	..	....	
		Unamanjeri	..	..	752	..	752	..		
		Kumili	..	..	683	..	683	..		
		Kattúr	..	..	2,894	..	2,894	..		
		Alattúr	..	..	488	..	488	..	No. 168, 17th June.	Transferred from other forests and notified under section 4.
		Illaiúr	..	..	702	..	702	..		
		Sirukunram A ..	..	..	872	..	872	..		
		Do. B ..	..	..	378	..	378	..		
		Hanumantaputteri ..	..	..	284	..	284	..		
		Acharapakam ..	864	..	..	..	864	..	....	
		Lattúr	1,011	..	..	..	1,011	..	....	
		Nedumaram	198	..	..	..	198	..	....	
		Venmani	238	..	..	..	238	..	....	
		Madaiyambakam ..	241	..	..	..	241	..	....	
		Settamai	135	..	..	..	135	..	....	
		Kattugudalúr ..	4,273	..	..	..	4,273	..	....	
		Rajapalaiyam ..	806	..	..	..	806	..	....	
		Korumbarai	250	..	..	..	250	..	....	
		Endattúr	168	..	..	..	168	..	....	
		Tandalam	1,428	..	..	..	1,428	..	....	
		Sirunallúr	503	..	..	..	503	..	....	
		Kannimangalam ..	142	..	..	..	142	..	....	
		Nariyamputtúr ..	326	..	..	..	326	..	....	
		Karukuli	600	..	..	..	600	..	....	
		Kadalamangalam ..	731	..	..	..	731	..	....	
		Vadatanúr	1,078	..	..	..	1,078	..	....	
		Vinayaganullúr ..	127	..	..	..	127	..	....	
		Kunamkolatúr ..	106	..	..	..	106	..	....	
		Bapanallúr	538	..	..	..	538	..	....	
		Mudukadu	86	..	..	..	86	..	....	

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Chingleput—*cont.*	Saidápet.	Pulikaradu	..	..	176	..	176	..		
		Tambaram	..	..	262	..	262	..		
		Kadapperi	..	..	229	..	229	..		
		Selaiyúr	..	..	492	..	492	..		
		Madurapakam ..	..	..	359	..	359	..		
		Nanmangalam ..	..	..	333	..	333	..		
		Madambakam ..	..	..	567	..	567	..		
		Eurumaiyur	..	..	197	..	197	..		
		Arasankulam ..	..	..	187	..	187	..	No. 108, 24th April.	Transferred from other forests and notified under section 4.
		Perumbakam A ..	..	..	639	..	639	..		
		Do. B ..	..	..	117	..	117	..		
		Maiyúr	..	..	534	..	534	..		
		Kovilpadagai ..	..	..	377	..	377	..		
		Sikkarayapuram ..	..	..	100	..	100	..		
		Kuttambakam ..	..	..	300	..	300	..		
		Millamalai	..	..	262	..	262	..		
		Tirumalavayal ..	..	..	389	..	389	..		
		Nandrambakam ..	..	..	262	..	262	..	No. 162, 13th June.	
		Tirusulam	..	..	270	..	270	..		
		Total ..	38,852	60·71	16,059	730	54,181	84·66		
North Arcot.	Chittoor ..	Virasettipalli ..	7,587	..	..	..	7,587	..	....	
		Chittapara	4,850	..	..	..	4,850	..	....	
		Basavapalli	2,027	..	..	..	2,027	..	....	
		Mohimandalam ..	2,522	..	..	..	2,522	..	....	
		Pachigunta	1,800	..	..	1,800	..	..	No. 190, 1st July.	Transferred to reserved forests.
		Irala	16,130	..	..	..	16,130	..	....	
		Santapet	2,276	..	..	..	2,276	..	....	
		Chittúr	360	..	..	..	360	..	....	
		Kinatipalli	1,417	..	..	..	1,417	..	....	
		Chillapalli	1,296	..	..	..	1,296	..	....	
		Panamúr	6,400	..	..	..	6,400	..	....	
	Chendragiri.	Mamandúr extension.	8,000	..	..	..	8,000	..	....	
		Tirupati Hill ..	16,000	..	..	..	16,000	..	....	
		Balapalli	40,640	..	..	..	40,640	..	....	
		Nagapatla	8,320	..	..	..	8,320	..	No. 86, 31st Feb.	Notified under section 4 during 1889-90.
		Mungilpattu	23,040	..	..	..	23,040	..	„ 84, „ „	
	Palmanér.	Charagal	19,200	..	..	..	19,200	..	....	
		Pednaigdrug ..	12,800	..	..	..	12,800	..	....	
		Panamadangi ..	9,600	..	..	..	9,600	..	....	
		Paradarami extension.	2,500	..	..	..	2,500	..	....	
		Sinnagunta	6,400	..	..	..	6,400	..	....	
		Naickaneri	1,280	..	..	..	1,280	..	....	
	Gudiyátam.	Mortana	9,600	..	..	..	9,600	..	....	
		Vikramasi	161	..	..	161	..	..	No. 144, 21st May.	Transferred to reserved forests.
		Gundalapalli ..	2,620	..	20,400	..	*23,020	..	No. 42, 21st Jan.	* Notified under section 4 during 1889-90.
		Pattalakuppam ..								
		Karapatla								
	Vellore ..	Ambur extension ..	25,600	..	..	..	25,600	..	....	
		Arasampet	18,000	..	..	..	18,000	..	....	
		Javadi Hill block ..	20,400	..	..	..	20,400	..	....	
		Arasampet do. ..								
		Naickaneri do. ..								
	Pólúr ..	Kelur	3,537	..	..	..	3,537	..	....	
		Alleyamangalam ..	10,062	..	..	..	10,062	..	....	
		Kapalur	1,267	..	..	..	1,267	..	....	
		Malayalam	12,800	..	..	..	12,800	..	....	† Designated the slopes of Javadi Hill in the previous year's return.
		Santavasal	†19,200	..	6,300	..	*25,500	..	....	
		Mulakadu								
	Arcot ..	Satur	1,048	..	..	..	1,048	..	....	
		Sennaleri	1,675	..	..	‡ 1,675	..	..	No. 196, 6th July.	
		Enadivadi	1,567	..	..	..	1,567	..	....	
		Tandalappantangal ..	1,112	..	..	..	1,112	..	....	‡ Transferred to reserved forests.
		Sholavaram	1,232	..	..	..	1,232	..	....	
		Amur	6,020	..	..	..	6,020	..	....	
		Kolatur	1,779	..	..	..	1,779	..	....	
		Minnel	1,378	..	..	..	1,378	..	....	
	Wálajáh.	Gódalúr	535	..	..	535	..	..	No. 42, 11th Feb.	Transferred to reserved forests.
		Banavaram	1,051	..	..	..	1,051	..	....	
		Ammanur	203	..	..	203	..	..	No. 44, 11th Feb.	Transferred to reserved forests.
		Anantapuram or Uraiyur.	540	..	..	540	..	..	No. 43, 11th Feb.	
		Vadantangal	64	..	..	..	64	..	....	

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
North Arcot—*cont.*	Wálajáh—*cont.*	Balakishnapuram ..	63	..	..	..	63	..	..	
		Katapakam	145	..	..	..	145	..	..	
		Ayal	16	..	..	..	16	..	..	
		Banavaram	35	..	..	..	35	..	..	
		Head Assistant Collector's office compound.	4	..	..	..	4	..	..	
	Wandiwash.	Venkundram	1,288	..	..	..	1,288	..	..	
		Pennúr	939	..	..	..	939	..	..	
		Badúr	873	..	..	..	873	..	..	
		Nambédu	720	..	..	..	720	..	..	
		Kadiyalam	125	..	..	..	125	..	..	
		Nedungunam ..	1,797	..	..	..	1,797	..	..	
		Veshamangalam ..	1,148	..	..	..	1,148	..	..	
		Nedungal	3,645	..	..	..	3,645	..	..	
		*Total ..	346,694	541·71	26,700	4,914	368,480	575·75		
South Arcot.	No. I, Tiruvannámalai.	Valasamalai ..	7,000	..	* 5,738	..	12,738	..	..	* Result of correction.
		Tennmalai	20,000	..	*30,428	..	50,428	..	..	
		Pelamaradur or Garugamandiyar.	8,000	..	* 1,148	..	9,148	..	..	
		Nallapattu	7,000	..	..	* 252	6,748	..	..	
		Melchengam ..	..	..	2,000	..	2,000	..	Board's Proceedings, Forest No. 122 of 28th Feb. 1890.	
		Pinjár	..	..	8,640	..	8,640	..		
		Mannurmangalam ..	..	..	4,160	..	4,160	..		
		Eraiyurmalai ..	..	..	7,125	..	7,125	..		
		Uchimalai	..	..	3,500	..	3,500	..		
		Puwalai	..	..	3,200	..	3,200	..		
		Rayandapuram ..	..	..	7,000	..	7,000	..		
		Sinniyampettai ..	..	..	3,720	..	3,720	..		
		Kanji	..	..	3,040	..	3,040	..		
		Gungampattu ..	..	..	1,920	..	1,920	..		
		Sorakalattúr ..	..	..	7,600	..	7,600	..		
		Devanandal ..	..	..	2,000	..	2,000	..		
		Kadambai	..	..	2,000	..	2,000	..		
		Tachampet	..	..	2,300	..	2,300	..		
	No. II, Tindivanam.	Pudipallam	3,748	..	* 646	..	4,394	..	..	
		Pakkamalai ..	9,032	..	* 5,862	..	14,894	..	..	
		Kurumpuram, 1st bit.	300	..	* 256	..	556	..	..	
		Panchalam ..	1,200	..	..	* 10	1,190	..	..	
		Peradikuppam ..	1,402	..	..	* 673	729	..	..	
		Akkúr	1,200	..	* 150	..	1,350	..	..	
		Naduvandúr ..	2,808	..	..	* 8	2,800	..	..	
	No. III, Villupuram.	Nabob's tope ..	40	..	* 30	† 70	..	..	No. 334, 18th Nov.	† Transferred to reserved forests.
		Panampattu ..	254	..	* 597	..	851	..	..	
		Valudareddi ..	125	..	* 259	..	384	..	..	
		Kappiambeliyúr ..	507	..	* 305	..	812	..	..	
		Gangarampalaiyam ..	349	..	* 163	..	512	..	..	
		Vakkúr	193	..	* 191	..	384	..	..	
		Vikravandi	311	..	..	* 55	256	..	..	
		Melkondai	495	..	..	* 15	480	..	..	
		Satanúr, 1st bit ..	226	..	..	* 22	204	..	..	
		Narasinganur ..	377	..	* 51	..	428	..	..	
		Gundalapuliyur ..	882	..	* 58	..	940	..	..	
		Karanai	200	..	..	* 72	128	..	..	
		Satanur, 2nd bit ..	228	..	* 92	..	320	..	..	
		Aganur	1,447	..	* 44	† 1,491	..	..	No. 21, 20th Dec.	
		Ariyalur	350	..	* 686	..	1,036	..	..	
		Turinjikadu	700	..	* 153	..	853	..	..	
		Pulanjimalai	438	..	* 415	..	853	..	..	
		Tandavasamudram ..	2,000	..	* 112	..	2,112	..	..	
		Ramapuram	1,330	..	* 538	..	1,868	..	..	
		Vellakarai	1,604	..	..	* 36	1,568	..	..	
		Valudalampattu ..	900	..	* 8	..	908	..	..	
		Sammatikuppam ..	350	..	* 14	† 364	..	..	No. 8, 23rd Dec.	
	No. IV, Cuddalore.	Siruvattur	..	..	212	..	212	..	Board's Proceedings, Forest No. 122 of 28th Feb. 1890.	
		Renganadapuram ..	..	..	620	..	620	..		
		Puvankuppam ..	..	..	640	..	640	..		
		Selambanadampet ..	650	..	* 130	..	780	..	..	
		Marungur	400	..	..	† 224 * 176	..	..	No. 164, 10th June.	
		Vegakottai	600	..	..	* 120	480	..		

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
South Arcot—*cont.*	No. IV, Cuddalore—*cont.*	Vakakottu, 1st bit ..	2,399	..	* 685	..	3,084	..	....	
		Valudayampattu ..	1,699	..	..	* 163	1,536	..	....	
		Peramattúr	1,700	..	..	* 664	1,036	..	....	
		Kanjiruppu, 1st bit ..	2,000	..	* 956	..	2,956	..	....	
		Do. 2nd do. ..	1,240	..	* 1,279	..	2,519	..	....	
		Velankuppam ..	1,000	..	* 94	..	1,094	..	....	
		Talankoda	201	..	* 16	..	217	..	....	* Result of correction.
		Fort Saint David ..	45	..	..	* 20	25	..	....	
		Shonankuppam ..	195	..	..	* 55	140	..	....	
		Doni Dorai	89	..	* 103	..	192	..	....	
		Nochikadu	550	..	* 90	..	640	..	....	
		Periyakuppam ..	1,599	..	* 84	..	1,683	..	....	
	No. IV, Chidambaram.	Adivarahanullur ..	..	..	1,860	..	1,860	..	Bd.'s Proceedings, Forest No. 122 of 28th February 1890.	
		Nisengam	..	..	800	..	800	..		
		Rampakam	..	..	635	..	635	..		
		Kindapuram	..	..	972	..	972	..		
		Kolakudi	..	..	659	..	659	..		
		Nayanur	1,650	..	* 384	..	2,034	..	....	
		Adukkam	1,800	..	* 369	..	2,169	..	....	
		Attipakam	2,000	..	* 2,800	..	4,800	..	....	
		Swamimalai, 1st bit ..	1,500	..	* 3,141	..	4,641	..	....	
		Do. 2nd do. ..	2,500	..	* 3,080	..	5,580	..	....	
		Nattamur, 1st bit ..	4,000	..	* 761	..	4,761	..	....	
		Do. 2nd do. ..	3,000	..	* 1,000	..	4,000	..	....	
		Sidevi	3,000	..	* 1,243	..	4,243	..	....	
		Alwarmalai	5,000	..	* 3,950	..	8,950	..	....	
		Sirupakkam	1,000	..	* 228	..	1,228	..	....	
		Edakkal	1,900	..	* 1,842	..	3,742	..	....	
		Kutadi	2 000	..	..	* 234	1,766	..	....	
	No. V, Tirukoilúr.	Pandur	1,000	..	..	..	1,000	..	....	
		Velur	550	..	* 1,254	..	1,804	..	....	
		Perichanur	700	..	* 228	..	928	..	....	
		Velandai	..	..	1,200	..	1,200	..	Bd.'s Proceedings, Forest No. 122 of 28th February 1890.	
		Sengamédu	..	..	755	..	755	..		
		Settamur	..	..	1,510	..	1,510	..		
		Odiyattur	..	..	1,696	..	1,696	..		
		Emappur	..	..	340	..	340	..		
		Mambakam	..	..	480	..	480	..		
		Elandorai	..	..	307	..	307	..		
		Tiruvananallur ..	..	..	240	..	240	..		
		Kalamaradur ..	..	..	1,350	..	1,350	..		
		Kungagaram ..	..	..	5,090	..	5,090	..		
		Pachaipalayam ..	..	..	1,600	..	1,600	..		
		Kallamedu	..	..	1,235	..	1,235	..		
		Periyanesalur ..	..	..	720	..	720	..		
		Javadugudi	..	..	650	..	650	..		
		Sattiyam	..	..	416	..	416	..		
	No. VII, Vriddhachalam.	Vriddhachalam tank.	..	..	192	..	192	..		
		Kammapuram ..	..	..	1,800	..	1,800	..		
		Narimanam	..	..	640	..	640	..		
		Periyakurchi ..	..	..	360	..	360	..		
		Velankulam	..	..	1,390	..	1,390	..		
		Kattiyanallur ..	..	..	960	..	960	..		
		Total ..	120,963	189·00	159,195	4,724	275,434	430·37		
Salem ..	Atúr ..	Pattimedu	3,046	..	..	..	3,046	..	....	
		Nagalur	6,138	..	..	..	6,138	..	....	
		Thumbal	3,680	..	..	..	3,680	..	....	
		Mannur	..	..	4,000	..	4,000	..	No. 13, 20th December.	Transferred from other forests and notified under section 4.
		Pattimedu extension.	..	..	1,200	..	1,200	..		
		Thumbal do. ..	..	..	4,800	..	4,800	..		
	Salem ..	Pillapadi	4,992	..	..	..	4,992	..	....	
		Mallapuram Ghât ..	2,285	..	..	..	2,285	..	....	
		Mallapuram Ghât extension.	640	..	..	..	640	..	....	
		Kurumbapatti ..	10,000	..	..	..	10,000	..	....	
		Vanavasi	9,000	..	..	..	9,000	..	....	
		Ramaswamimalai ..	3,000	..	..	..	3,000	..	....	
		Gundakal	4,000	..	..	4,000	..	..	No. 229, 30th July	Transferred to reserved forests.
		Manukonda	5,500	..	..	5,500	..	..	No. 233 ,, ,,	
		Puliyankad	1,000	..	..	..	1,000	..	....	
		Arasankad	2,500	..	..	..	2,500	..	....	
		Kaputu	3,500	..	..	..	3,500	..	....	

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Salem—*cont.*	Salem—*cont.*	Mattikottai	3,500	..	..	..	3,500	..	....	
		Pungamadavi ..	2,500	..	..	..	2,500	..	....	
		Godumalai	7,000	..	..	7,000	..	..	No. 206, 15th July.	Transferred to reserved forests.
		Jalluttu	12,000	..	..	12,000	..	..	,, 232, 30th ,,	
		Pudupatti	7,500	..	..	..	7,500	..	....	
		Kanjamalai	4,500	..	..	..	4,500	..	....	
		Nagaramalai	1,280	..	..	..	1,280	..	....	
		Yerkkad lake ..	22	..	..	22	..	..	No. 27, 31st Dec.	Reservation of this block was cancelled.
		Mary land	400	..	..	..	400	..	....	
		Saniyasimalai ..	600	..	..	..	600	..	....	
		Kudimadavu	4,307	..	..	..	4,307	..	....	
		Yelatur	2,000	..	..	..	2,000	..	....	
		Vellampatti	3,500	..	..	..	3,500	..	....	
		Kurichi	2,300	..	..	..	2,300	..	....	
		Mallur	5,000	..	..	..	5,000	..	....	
	Uttenkarai.	Ammapalaiyam ..	9,216	..	..	..	9,216	..	....	
		Kowramalai extention	4,000	..	..	..	4,000	..	....	
		Mukkanur	8,000	..	..	..	8,000	..	....	
		Nochikotai	7,917	..	..	..	7,917	..	....	
		Kalnad	4,320	..	..	..	4,320	..	....	
		Karangal	4,320	..	..	..	4,320	..	....	
		Uttenkarai, new ..	3,200	..	..	..	3,200	..	....	
		Wonnagiri	2,944	..	..	..	2,944	..	....	
		Kalavi	4,160	..	..	..	4,160	..	....	
		Poyapatti	3,488	..	..	..	3,488	..	....	
		Morappur	4,000	..	..	..	4,000	..	....	
		Harúr, new	1,901	..	..	..	1,901	..	....	
		Tirtamalai	11,046	..	..	..	11,046	..	....	
		Vepampatti	8,640	..	..	..	8,640	..	....	
		Kaladipatti	2,912	..	..	..	2,912	..	....	
		Tenkaraikotta ..	2,368	..	..	..	2,368	..	....	
		Kowramalai	8,512	..	..	..	8,512	..	....	
	Tirupatúr.	Vellakuttai	1,152	..	..	..	1,152	..	....	
		Kottanur	7,257	..	..	..	7,257	..	....	
		Garagamandiar ..	1,280	..	..	..	1,280	..	....	
		Madagatur	3,200	..	..	..	3,200	..	....	
		Andiyappanur ..	4,704	..	..	..	4,704	..	....	
	Tirupatúr and Uttankarai.	Govindapuram ..	3,104	..	..	..	3,104	..	....	
	Tirupatúr & Krishnagiri.	Nandibanda	2,500	..	..	..	2,500	..	....	
	Hosúr ..	Hulibanda	7,360	..	..	..	7,360	..	....	
		Pani	5,856	..	..	..	5,856	..	....	
		Kundukotta	4,768	..	..	..	4,768	..	....	
		Sivanhalli	4,992	..	..	..	4,992	..	....	
	Dharmapuri.	Kesaragili	6,400	..	..	..	6,400	..	....	
		Picklymalai	6,409	..	..	..	6,400	..	....	
		Masukal	9,600	..	..	..	9,600	..	....	
		Bianurmalai ..	11,500	..	..	..	11,500	..	....	
		Bathanavadi ..	27,000	..	..	..	27,000	..	....	
		Perumbalai	12,000	..	..	..	12,000	..	....	
		Kalapambadi ..	9,500	..	..	..	9,500	..	....	
		Toppur	7,000	..	..	..	7,000	..	....	
	Krishnagiri.	Maharajagadai ..	10,304	..	..	..	10,304	..	....	
		Neralkotta	7,040	..	..	..	7,040	..	....	
	Tiruchengód.	Suriyamalai	5,000	..	..	..	5,000	..	....	
		Total ..	364,551	569·61	10,000	28,522	346,029	540·67		
Trichinopoly.	Trichinopoly.	Ettarai	483	..	..	..	483	..	....	
		Adavattur, No. I ..	370	..	..	..	370	..	....	
		Do. ,, II ..	331	..	..	..	331	..	....	
		Valur	382	..	..	..	382	..	....	
		Kottapatti	211	..	..	..	211	..	....	
		Nattarajapuram ..	109	..	..	..	109	..	....	
		Alandur	149	..	..	..	149	..	....	
		Adavatur	144	..	..	..	144	..	....	
		Punganúr	281	..	..	..	281	..	....	
	Kulitalai.	Shemmalai, No. II ..	1,593	..	..	..	1,593	..	....	
		Maradur	180	..	..	..	180	..	....	
		Maiyanur	50	..	..	..	50	..	....	
		Pudur	143	..	..	..	143	..	....	
		Sekkanam	119	..	..	..	119	..	....	

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Area.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Trichinopoly—*cont.*	Kulitalai—*cont.*	Mahadanapuram ..	191	..	..	..	191	..	....	
		Pillapalaiyam ..	11	..	..	..	11	..	....	
		Vengampatti ..	103	..	..	..	103	..	....	
		Panjantangi hill valley.	262	..	..	..	262	..	....	
		Tani and Sengammakaradu.	714	..	..	..	714	..	....	
		Karuppur Reddipatti hill.	4,112	..	..	..	4,112	..	....	
	Musiri ..	Omandur	321	..	..	..	321	..	....	
		Talayanatam and Kotrapati.	333	..	..	..	333	..	....	
		Tirutalaiyur	125	..	..	..	125	..	....	
		Yedumalai	959	..	..	..	959	..	....	
		Vellakalpatti ..	1,224	..	..	..	1,224	..	....	
		Pulivalem	522	..	..	..	522	..	....	
		Mavalipatti	1,010	..	..	..	1,010	..	....	
		Visalatchiammal samudram	138	..	..	..	138	..	....	
		Kanjurmalai and Uduvampattimalai.	3,000	..	..	..	3,000	..	....	
		Kanapadi (Vunnad)..	10,000	..	..	..	10,000	..	....	
	Perambalúr.	Kannam	195	..	..	..	195	..	....	
		Kotavasal	167	..	..	..	167	..	....	
		Koraipadai	221	..	..	..	221	..	....	
		Valaiyur	3,000	..	..	..	3,000	..	....	
		Do.	3,480	..	..	..	3,480	..	....	
		Udumbiyam	500	..	..	..	500	..	....	
		Periyavenmani ..	138	..	..	..	138	..	....	
		Tondapadi	276	..	..	..	276	..	....	
		Anukur	487	..	..	..	487	..	....	
		Malvoy	264	..	..	..	264	..	....	
		Mossiyam	152	..	..	..	152	..	....	
		Padu Vallakudi ..	113	..	..	..	113	..	....	
		Kallakudi	123	..	..	..	123	..	....	
		Attiyur	98	..	..	..	98	..	....	
		Veppantottai ..	213	..	..	..	213	..	....	
		Pasumbalur .. .. / Terkukarai	149	..	..	..	149	..	....	
		Pasumbalur .. .. / Vadakarai	240	..	..	..	240	..	....	
		Nunne	175	..	..	..	175	..	....	
		Kolattur	116	..	..	..	116	..	....	
		Orgalur	190	..	..	..	190	..	....	
		Sirukudal	166	..	..	..	166	..	....	
		Saturpakam	352	..	..	..	352	..	....	
		Kelapuliyur	229	..	..	..	229	..	....	
		Neikuppai, No. I ..	154	..	..	..	154	..	....	
		Do. ,, II ..	90	..	..	..	90	..	....	
		Yesanai	113	..	..	..	113	..	....	
		Peramattur	658	..	..	..	658	..	....	
		Mavalingai	260	..	..	..	260	..	....	
		Pulambadi, No. I ..	222	..	..	..	222	..	....	
		Do. ,, II ..	645	..	..	..	645	..	....	
		Do. ,, III ..	133	..	..	..	133	..	....	
		Viswakudi	150	..	..	..	150	..	....	
		Mattavarai	283	..	..	..	283	..	....	
		Araiyur, No. I ..	290	..	..	..	290	..	....	
		Do. ,, II ..	140	..	..	..	140	..	....	
		Ladapurm	103	..	..	..	103	..	....	
		Sittali	404	..	..	..	404	..	....	
		Suniya Vadakari ..	268	..	..	..	268	..	....	
		Nattapur	175	..	..	..	175	..	....	
		Makurambalur ..	269	..	..	..	269	..	....	
		Satanavadi	214	..	..	..	214	..	....	
		Vengalam	361	..	..	..	361	..	....	
		Kalpadai	300	..	..	..	300	..	....	
		Venparur	1,024	..	..	..	1,024	..	....	
		Paravai	150	..	..	..	150	..	....	
		Nergunam	1,253	..	..	..	1,253	..	....	
		Tevaiyur	253	..	..	..	253	..	....	
		Metupálaiyam ..	539	..	..	..	539	..	....	
		Elambalur	214	..	..	..	214	..	....	
		Maravattur	261	..	..	..	261	..	....	
		Kanakasittur ..	310	..	..	..	310	..	....	
		Periyur	856	..	..	..	856	..	....	
		Vannarpudi	214	..	..	..	214	..	....	

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Trichinopoly—*cont.*	Perambalúr—*cont.*	Tiruvalandurai ..	197	..	..	..	197	..	....	
		Bhamadesam ..	273	..	..	..	273	..	....	
		Kurumbalur	366	..	..	..	366	..	....	
		Numbakurchi, No. I.	328	..	..	..	328	..	....	
		Do. ,, II.	165	..	..	..	165	..	....	
		Kilarasu	207	..	..	..	207	..	....	
		Kilarkarai	119	..	..	..	119	..	....	
		Yeraiyur and Naduvasal.	562	..	..	..	562	..	....	
		Naduvasal	176	..	..	..	176	..	....	
		Sirumatur	499	..	..	..	499	..	....	
	Udryárpálaiyam.	Jayankonda Sholapuram, No. I.	150	..	..	..	150	..	....	
		Jayankonda Sholapuram, No. II.	300	..	..	..	300	..	....	
		Vanavallur	200	..	..	..	200	..	....	
		Malangunkudiyirup-pu.	150	..	..	150	..	..	No. 199, 6th July.	Transferred to reserved forests.
		Kodukur	100	..	..	..	100	..	....	
		Kanjuli	800	..	..	..	800	..	....	
		Aiyur	1,400	..	..	..	1,400	..	....	
		Tirukanam	650	..	..	..	650	..	....	
		Pasikulam	100	..	..	..	100	..	....	
		Adankurchi	250	..	..	250	..	..	No. 195, 6th July.	Transferred to reserved forests.
		Sittadaiar	54	..	..	..	54	..	....	
		Kulamur	200	..	..	..	200	..	....	
		Periyakurchi ..	150	..	..	..	150	..	....	
		Sattambadi	1,000	..	..	..	1,000	..	....	
		Alvoy	300	..	..	..	300	..	....	
		Ambapur	200	..	..	..	200	..	....	
		Ulliyagudi	200	..	..	..	200	..	....	
		Sundreswarapuram ..	150	..	..	..	150	..	....	
		Periyavalaiyan ..	1,000	..	..	..	1,000	..	....	
		Vettiyarvettu ..	650	..	..	..	650	..	....	
		Kovilur	700	..	..	..	700	..	....	
		Mudukulam ..	1,200	..	..	..	1,200	..	....	
		Velangudi	900	..	..	..	900	..	....	
		Kolamanikkam ..	242	..	..	..	242	..	....	
		Aramanakurchi ..	91	..	..	..	91	..	....	
		Kariyapakam ..	83	..	..	..	83	..	....	
		Tiruvenganur, I to V.	136	..	..	..	136	..	....	
		Varapparkurchi, I to VI.	190		..	..	190	..	....	
		Sattambadi, I to XI ..	179	..	..	..	179	..	....	
		Sripurandan, I and II.	434	..	..	..	434	..	....	
		Velakurchi, I to III ..	48	..	..	..	48	..	....	
		Annagarampatai, I to V	58	..	..	..	58	..	....	
		Tennamanallúr ..	10	..	..	..	10	..	....	
		Total ..	64,087	100·14	..	400	63,687	99·51		
Tanjore.	Northern.	Vettangudi	1,900	..	..	..	1,900	..	....	
		Elantope	18	..	..	..	18	..	....	
		Talandondi	100	..	..	..	100	..	....	
		Karpalam	54	..	..	..	54	..	....	
		Kadagavinayaganallur.	90	..	..	..	90	..	....	
		Ambanur, No. I ..	134	..	..	..	134	..	....	
		Do. ,, II ..	122	..	..	..	122	..	....	
		Kaliyappanallur ..	20	..	..	..	20	..	....	
	Southern.	Kodiyarkadu, Point Calimere.	4,355	..	..	..	4,355	..	....	
		Nadur, No. I ..	1,000	..	..	1,000	..	..	No. 110, 20th April.	Transferred to reserved forests.
		Edangankottai ..	200	..	..	..	200	..	....	
		Perumagalur ..	13	..	..	..	13	..	....	
		Kolakudi	13	..	..	..	13	..	....	
		Mudukurchi	10	..	..	..	10	..	....	
		Anaikadu	10	..	..	..	10	..	....	
		Vattagudi	10	..	..	..	10	..	....	
		Alatur	10	..	..	..	10	..	....	
		Kannugudi, No. I ..	10	..	..	..	10	..	....	
		Do. ,, II ..	266	..	..	..	266	..	....	
		Pambutukadu ..	203	..	..	..	203	..	....	
		Kodavani	53	..	..	..	53	..	....	
		Vakkanattu reserve ..							....	
		Nannilam	2	..	..	..	2	..	....	

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Area.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Tanjore —*cont.*	Southern —*cont.*	Melakadu	331	..	..	..	331	..	....	
		Vendayampatti ..	231	..	..	..	231	..	....	
		Kambayanattem ..	65	..	..	..	65	..	....	
		Kasangulam, No. I ..	100	..	..	..	100	..	....	
		Do. ,, II ..	141	..	..	..	141	..	....	
		Talarapatti	538	..	..	..	538	..	....	
		Pinjanmodu	116	..	..	..	116	..	....	
		Vaduvúr, No. I ..	57	..	..	..	57	..	....	
		Do. ,, II ..	94	..	..	..	94	..	....	
		Do. ,, III ..	38	..	..	..	38	..	....	
		Do. ,, IV ..	133	..	..	..	133	..	....	
		Do. ,, V ..	124	..	..	..	124	..	....	
		Do. ,, VI ..	146	..	..	..	146	..	....	
		Do. ,, VII ..	212	..	..	..	212	..	....	
		Sorapettai	70	..	..	..	70	..	....	
		Ullikotai	130	..	..	..	130	..	....	
		Total ..	11,119	17·37	..	1,000	10,119	15·81		
North Coimbatore.	Erode ..	....	27,927	..	..	..	27,927	..	....	
	Karúr ..	....	3,549	..	..	..	3,549	..	....	
	Satyamangalam.	Talamalai	121,600	..	..	..	121,600	..	....	
		Gutiyalattúr	179,200	..	..	..	179,200	..	....	
	Kollegál.	Chickialúr	53,760	..	..	..	53,760	..	....	
		Dodasampagai ..	65,920	..	..	..	65,920	..	No. 73, 12th Mar.	Notified under section 4 during 1889-90.
		Yedaralli ..	478,080	..	..	*1,920	476,160	..	....	*Deducted for the sandalwood reserves, &c., included in the areas of reserved forests.
		Ponachi ..								
	Bhavání..	Palamalai	28,160	..	..	..	28,160	..	....	
		Burgúr	215,040	..	..	..	215,040	..	....	
		Total ..	1,173,236	1,833·18	..	1,920	1,171,316	1,830·18		
South Coimbatore.	Sholakarai, Coimbatore taluk.	Small Sholakarai reserve	81	..	..	81	..	..	No. 167, 17th June.	Transferred to reserved forests.
	Palladam taluk.	Alatúr	237	..	..	..	237	..	....	
		Ammapalaiyam ..	119	..	..	..	119	..	....	
		Arasúr	94	..	..	..	94	..	....	
		Asanellipalaiyam ..	160	..	..	..	160	..	....	
		Avánasi	55	..	..	..	55	..	....	
		Ichipatti	639	..	..	..	639	..	....	
		Iduvai	125	..	..	*31	94	..	....	
		Itiverampalaiyam ..	581	..	..	..	581	..	....	
		Kadirampalaiyam ..	188	..	..	*3	185	..	....	
		Kaduvettipalaiyam ..	80	..	..	..	80	..	....	
		Kalipalaiyam ..	123	..	..	..	123	..	....	
		Kandampalaiyam ..	92	..	..	..	92	..	....	
		Kaniyampalaiyam ..	156	..	..	..	156	..	....	
		Kaniyúr	820	..	..	*7	813	..	....	
		Kardibavi	50	..	..	..	50	..	....	
		Karaipudúr	92	..	..	..	92	..	....	
		Karavalúr	522	..	..	..	522	..	....	
		Kurumbapalaiyam ..	299	..	..	..	299	..	....	
		Koramatampatti ..	306	..	..	*14	292	..	....	
		Kodangipalaiyam ..	121	..	..	..	121	..	....	
		Kuppandapalaiyam ..	69	..	..	..	69	..	....	
		Kuttagam	582	..	..	..	582	..	....	
		Mangarasuvalaiyapalaiyam	271	..	..	..	271	..	....	
		Moparipalaiyam ..	163	..	..	..	163	..	....	
		Naranapuram ..	556	..	..	..	556	..	....	
		Narayampalli ..	51	..	..	..	51	..	....	
		Nilambúr	113	..	..	..	113	..	....	
		Papakulam	103	..	..	..	103	..	....	
		Paruvai	76	..	..	..	76	..	....	
		Pattampalaiyam ..	126	..	..	*47	79	..	....	*Result of correction — *vide* Board's Proceedings, dated 18th June 1889, Forest No. 518, Mis.
		Perumanallúr ..	159	..	..	..	159	..	....	
		Perunkarunaipalaiyam	53	..	..	..	53	..	....	
		Pudupalaiyam ..	793	..	..	..	793	..	....	
		Pulippar	72	..	..	..	72	..	....	
		Puluvapatti	111	..	..	..	111	..	....	
		Pumalúr	291	..	..	..	291	..	....	
		Rakkiyapalaiyam ..	278	..	..	..	278	..	....	

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
South Coimbatore —*cont.*	Palladam taluk—*cont.*	Samalapuram	52	..	..	..	52	..	....	
		Settipalaiyam ..	159	..	..	..	159	..	....	
		Sanneripalayam ..	75	..	..	..	75	..	....	
		Sokkanúr	132	..	..	..	132	..	....	
		Sukkampalaiyam ..	479	..	..	..	479	..	....	
		Tandagarampalaiyam.	83	..	..	..	83	..	....	
		Tattanur	290	..	..	* 1	289	..	....	* Result of correction — *Vide* Board's Proceedings, dated 18th June 1889, Forest No. 518, Mis.
		Tekkalur	389	..	..	..	389	..	....	
		Taranallur	82	..	..	..	82	..	....	
		Tulukamatur ..	60	..	..	..	60	..	....	
		Uppilipalaiyam ..	99	..	..	..	99	..	....	
		Vadugapalaiyam ..	57	..	..	..	57	..	....	
		Do. ..	293	..	..	..	293	..	....	
		Vallipuram	52	..	..	..	52	..	....	
		Velampalaiyam ..	81	..	..	..	81	..	....	
		Do. ..	75	..	..	..	75	..	....	
		Virapandi	175	..	..	..	175	..	....	
		Total ..	11,440	17·88	..	184	11,256	17·59		
Madura.	No. I, Uttamapalaiyam.	Kombai	6,400	..	..	..	6,400	..	....	
		No. I, Vellaikaradu.	965	..	..	..	965	..	....	
		,, II, Sonaikaradu.	182	..	..	..	182	..	....	
		,, III, Mottaikaradu.	193	..	..	..	193	..	....	
		,, IV, Kuttaikaradu.	125	..	..	..	125	..	....	
		,, V, Nagamalaikaradu.	118	..	..	..	118	..	....	
		,, VI, Perumalkovilkaradu.	573	..	..	..	573	..	....	
		,, VII, Sanniyasikovilkakaradu ..	283	..	..	..	283	..	....	
		Karugal Dhoni Medu.	2,560	..	..	..	2,560	..	....	
		Adukam	3,200	..	..	..	3,200	..	....	
		Murugamalai F.F.R.	3,226	..	..	..	3,226	..	....	
		The southern slopes of the Palni hills ..	25,600	..	..	..	25,600	..	....	
		The northern slopes of the Palni hills ..	16,000	..	..	..	16,000	..	....	
		All the lands on the lower Palni hills lying outside the limits of certain cultivable waste, selected and set apart	32,000	..	..	..	32,000	..	....	
	No. II or Kodaikánal.	Arunkanal	2,560	..	..	2,560	..	..	No. 205, 20th July	Transferred to reserved forests.
		Kallar	9,600	..	..	9,600	..	..	No. 217, 24th July	
		Unjamalai	157	..	..		157	..	....	
		Kokkuparai	130	..	..		130	..	....	
		Manjakaraiar ..	1,600	..	..	..	1,600	..	....	
		Vanjankanal								
		Alayadikanal								
		Checkodikanal ..								
		Kadugatadikadu ..								
		Koviladikanal ..								
		Kumalarakadu ..								
		Talakodikadu ..								
		Kivikuttikadu ..								
		Ponvettukanal ..								
		Periyasalaikadu ..								
		Poliyapattimalai ..								
		Elamalai								
		Nadumbaraikadu ..								
	No. III or Dindigul.	Karandamalais ..	22,400	..	..	..	22,400	..	....	
		Panjantangi hills ..	3,200	..	..	..	3,200	..	....	
	No. IV or Mettupatti.	Waggatumalai F.F.R.	4,200	..	..	..	4,200	..	....	
		Kachakatti F.F.R. ..	1,694	..	..	..	1,694	..	....	
		Chembulimalai ..	1,600	..	..	..	1,600	..	....	

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Madura —*cont.*	No. IV or Mettupatti —*cont.*	Mottamalai	1,280	..	..	..	1,280	..	....	
		Perumalai	2,560	..	..	..	2,560	..	....	
		Pulamalai	1,920	..	..	..	1,920	..	....	
		Buthagudimalai ..	1,600	..	..	1,600	..	..	No. 204, 19th July	Transferred to reserved forests.
	No. V or Alagar Hill.	Tiruparamkundram.	960	..	..	..	960	..	....	
		Elephant Rock ..	640	..	..	..	640	..	....	
		Ammamalai ..	1,600	..	..	..	1,600	..	....	
		Mudupattimalai ..								
		Vandiyurkaradu ..								
		Nalluvampatikaradu.	1,920	..	..	..	1,920	..	....	
		Total ..	151,046	236·01	..	13,760	137,286	214·50		
Tinnevelly.	Nánguneri.	Block I (*a*)	25,999	..	..	..	25,999	..	....	
		Teak Forest	284	..	..	284	..	..	No. 165, 10th June	Transferred to reserved forests.
		Chinnakadu defined in Mr. Baber's decision on the claims of inamdar ..	2,560	..	..	..	2,560	..	....	
	Ambásamudram.	Block II (*a*) and (*b*)..	53,819	..	..	..	53,819	..	....	
		Mullimalai	457	..	..	457	..	..	No. 307, 24th Oct.	Transferred to reserved forests.
		Kaliyamman kovil parai.	309	..	..	309	..	..	,, 308, ,,	
		Koviladi parai ..	125	..	..	125	..	..	,, 309, ,,	
		Salupparpadai ..	71	..	..	71	..	..	,, 310, ,,	
		Kolandamamalai ..	1,540	..	..	..	1,540	..	....	
	Tenkási.	Block III (*a*), (*b*) and (*c*).	10,643	..	..	..	10,643	..	....	
		Okaninranpadai ..	85	..	..	85	..	..	No. 198, 6th July	Transferred to reserved forests.
		Kavalkuttiperamba ..	375	..	..	375	..	..	,, 303, 24th Oct.	
		Kottamalai	860	..	..	860	..	..	,, 304, ,,	
		Nalankurchi ..	212	..	..	212	..	..	,, 305, ,,	
	Sankaranainárkoil.	Block IV (*a*) ..	30,713	..	..	..	30,713	..	....	
		Chunnambu peramba.	286	..	..	..	286	..	....	
		Seiyamalai and Vedamalai.	294	..	..	..	294	..	....	
	Srivilliputur.	Block V (*a*)	40,006	..	..	..	40,006	..	....	
		Kotankulam ..	473	..	..	..	473	..	....	
		Sapaniperamba .	376	..	..	376	..	..	No. 311, 24th Oct.	Transferred to reserved forests.
		Pulpattiperamba ..	51	..	..	51	..	..	,, 312, ,,	
		Valaikulamperamba.	1,120	..	..	..	1,120	..	....	
		Onipattimalai ..	530	..	..	530	..	..	No. 230, 30th July	Transferred to reserved forests.
		Martandamparai ..	135	..	..	135	..	..	,, 313, 24th Oct.	
	Tinnevelly	Talaiyuttu	891	..	..	..	891	..	....	
		Sivilaperiperamba ..	263	..	..	..	263	..	....	
	Tenkarai.	Kottamadakki ..	1,279	..	..	1,279	..	..	No. 306, 24th Oct.	Transferred to reserved forests.
		Kudiraimalai ..	13,393	..	..	..	13,393	..	....	
		Punnamparai ..	117	..	..	117	..	..	No. 111, 20th Apr.	Transferred to reserved forests.
		Kongrayakurchi ..	60	..	..	..	60	..	....	
		Kaliyavur ..	158	..	..	158	..	..	No. 197, 6th July	Transferred to reserved forests.
		Vellanad hills ..	4,367	..	..	..	4,667	..	....	
	Otapidáram.	Melavittam	708	..	..	..	708	..	....	
		Virusámpatti ..	294	..	..	..	294	..	....	
		Vaipár	813	..	..	..	813	..	....	
		Total ..	193,966	303·07	..	5,424	188,542	294·60		
North Malabar.	Wynaad.	Palépattur	861	..	..	115	746	..	Notification, dated 30th July, in the *District Gazette*.	
		Vengur	2,013	..	3,457	..	5,470	..		
		Chedlet	572	..	..	55	517	..		
		Karpur	1,221	..	..	468	753	..		
		Kalur	3,757	..	..	3,544	213	..		
		Excluded portions of Trans Beni.	4,300	..	..	4,300	..	..		
		Kudrakot	21,502	..	..	..	21,502	..	....	
		Padri	30,468	..	..	..	30,468	..	....	
		Cardamom forest ..	13,683	..	..	..	13,683	..	....	
		Kanot	25,600	..	..	..	25,600	..	....	
		Chapparam	112	..	..	..	112	..	....	
		Panniyatta	150	..	..	..	150	..	....	
		Advankunnu ..	39	..	..	..	39	..	....	
		Total ..	104,278	162·93	3,457	8,482	99,253	155·08		

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
South Malabar	Nilambúr.	Nilambúr block ..	5,036	..	..	..	5,036	..	....	Leased.
		Pokote	761	..	..	..	761	..	....	
		Panangod	859	..	..	..	859	..	....	
		Valluvasheri	914	..	..	..	914	..	....	
		Kanakut	669	..	..	..	669	..	....	
		Erambadam	581	..	..	..	581	..	....	
		Ambalakandi ..	1	..	..	..	1	..	....	
		Arimbrakutamala ..	322	..	..	..	322	..	....	
		Mangalasheriperamba	11	..	..	..	11	..	....	
		Puttalatta and Chittarikalparamba.	8	..	..	..	8	..	....	
		Muriyat	1,765	..	..	..	1,765	..	....	
		Kariyen	1,002	..	..	..	1,002	..	....	
		The Silent Valley ..	17,280	..	..	..	17,280	..	....	
		The new Amarampalam plantation.	96,000	..	..	..	96,000	..	....	
		Attapadi Valley.								
	Waluvanad taluk.	Block No. II ..	24,320	..	..	..	24,320	..	....	
		,, ,, III (*a*) ..	12,800	..	..	..	12,800	..	....	
		,, ,, III (*b*), I and III (*b*) II.	4,480	..	..	..	4,480	..	....	
		Block No. IV (*a*), IV (*b*) and IV (*c*).	16,640	..	..	..	16,640	..	....	
	Pálghat..	Chatamkulam Karaiperamba.	30	..	..	..	30	..	....	
		Tamburattapetai *alias* Pilacheripalaiyam.	100	..	..	..	100	..	....	
		Tiruvazhamkunnu *alias* Panakadam.	1,000	..	..	..	1,000	..	....	
		Total ..	184,579	288·40	..	..	184,579	288·40		
South Canara.	Mangalore	Todar reserve ..	458	..	..	..	458	..	....	
		Mujimale	3,200	..	..	..	3,200	..	....	
	Udipi ..	Tenkahola	2,039	..	..	..	2,039	..	....	
		Durgamale	1,602	..	..	1,602	..	..	No. 362, 28th Nov.	Transferred to reserved forests.
		Andar reserve ..	22,334	..	..	..	22,334	..	....	
	Uppinangadi.	Dharmastal Mandaji..	9,600	..	..	..	9,600	..	....	
		Charmairkanapadi ..	12,800	..	..	..	12,800	..	....	
	Kásaragód.	Parappa	7,680	..	..	..	7,680	..	....	
	Kondapur.	Harkúr block ..	1,920	..	..	* 1,062	858	..	....	* Rectification on survey.
		Kasankatti	262	..	..	..	262	..	No. 109, 20th Apr.	Notified under section 4 during 1889-90.
		Talabur Ane	640	..	..	..	640	..		
		Gundalur Parie ..	3,200	..	..	..	3,200	..	No. 295, 22nd October.	
		Jennal Ane	1,280	..	..	..	1,280	..		
		Korakappadahola ..	640	..	..	..	640	..		
	Mangalore.	....	27,693	..	..	..	27,693	..	....	
	Udipi ..	....	73,443	..	..	..	73,443	..	....	
	Uppinangadi	....	288,000	..	..	..	288,000	..	....	
	Kásaragód.	....	32,920	..	..	..	32,920	..	....	
	Coondapoor.	....	136,058	..	..	..	136,058	..	....	
		Total ..	625,769	977·76	..	2,664	623,105	973·60		
		Grand Total ..	3,390,580	5,297·78	215,411	72,724	3,533,267	5,520·72		

Abstract.

Chingleput	38,852	60·71	16,059	730	54,181	84·66	
North Arcot	346,694	541·71	26,700	4,914	368,480	575·75	
South Arcot	120,963	189·00	159,195	4,724	275,434	430·37	
Salem	364,551	569·61	10,000	28,522	346,029	540·67	
Trichinopoly..	64,087	100·14	..	400	63,687	99·51	
Tanjore	11,119	17·37	..	1,000	10,119	15·81	
North Coimbatore	1,173,236	1,833·18	..	1,920	1,171,316	1,830·18	
South Coimbatore	11,440	17·88	..	184	11,256	17·59	
Madura	151,046	236·01	..	13,760	137,286	214·50	
Tinnevelly	193,966	303·07	..	5,424	188,542	294·60	
North Malabar	104,278	162·93	3,457	8,482	99,253	155·08	
South Malabar	184,579	288·40	..	..	184,579	288·40	
South Canara	625,769	977·76	..	2,664	623,105	973·60	
Total ..	3,390,580	5,297·78	215,411	72,724	3,533,267	5,520·72	

Annual Form No. 59.

Forest Department, Madras, Southern Circle.

Area of other forests, 1889-90.

District.	Range.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Chingleput.	Saidápet	6,052	..	488	* 6,052	488	..	..	* Transferred to reserved lands.
	Chingleput	7,418	..	10,619	† 7,418	10,619	..	..	† Of this, 365 acres were included in correcting errors in previous estimate and the rest transferred to reserved lands.
	Tiruvallúr	1,342	..	..	..	‡ 1,342	..	..	‡ Shown in form No. 59-B in the previous year.
		..	..	4,605	..	4,605	..	..	
	Total ..	14,812	23·15	§ 15,712	13,470	17,054	26·65		§ Fresh selections.
North Arcot.	....	..	..	..	..	..	..	..	
South Arcot.	No. I, Tiruvannámalai.	291,884							
	,, II, Tindivanam.	28,985							
	,, III, Villupuram.	15,020							
	,, IV, Cuddalore and Chidambaram.	6,336 10,800	..	..	170,264	331,926	..	..	
	,, V, Tirukoilúr..	34,935							
	,, VI, Kallakurchi.	72,800							
	,, VII, Vriddhácha-lam.	41,430							
	Total ..	502,190	784·67	..	170,264	331,926	518·63		
Salem ..	Atúr	43,880	..	..	10,000	33,880	..	..	Transferred to reserved lands
	Tirupatúr	28,515	..	..	..	28,515	..	..	
	Námakal	17,500	..	..	..	17,500	..	..	
	Utenkarai	41,120	..	..	..	41,120	..	..	
	Krishnagiri	15,376	..	..	..	15,376	..	..	
	Hosúr	69,920	..	..	..	69,920	..	..	
	Total ..	216,311	337·99	..	10,000	206,311	322·36		
Trichinopoly.	Trichinopoly taluk.	..	..	2,681	..	2,681	..	..	
	Udaiyárpálaiyam do.	..	..	3,917	..	3,917	..	..	
	Kulitalai do.	..	..	5,837	..	5,837	..	..	
	Musiri do.	..	..	13,485	..	13,485	..	..	
	Perambalúr do.	..	..	678	..	678	..	..	
	Total ..	..	..	26,598	..	26,598	41·56		
Tanjore.	Southern	6,081	..	..	..	6,081	..	..	
	To be proposed for notification under section 4 during 1890-91.	..	..	20,485	..	20,485	..	..	
	Total ..	6,081	9·50	20,485	..	26,566	41·50		

Area of other forests, 1889-90—*cont.*

District.	Range.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
North Coimbatore.	....	..	..	..	..	..	..	..	
South Coimbatore.	Udamalpet	654	..	..	..	654	..	..	
	Pollâchi	121	..	..	..	121	..	..	
	Palladam	473	..	..	..	473	..	..	
	Bolampatti	64	..	..	..	64	..	..	
	Total ..	1,312	2·05	..	..	1,312	2·05		
Madura.	No. I, Uttamapalaiyam.	22,867	..	..	..	22,867	..	..	
	,, II, Kodaikânal..	32,000	..	..	..	32,000	..	..	
	,, III, Dindigul ..	14,210	..	..	..	14,210	..	..	
	,, IV, Mattupatti..	7,156	..	..	..	7,156	..	..	
	,, V, Alagar hill..	11,135	..	..	..	11,135	..	..	
	Total ..	87,368	136·51	..	..	87,368	136·51		
Tinnevelly.	Tenkarai	1,133	..	..	..	1,133	..	..	
	Nângunéri	9,691	..	..	..	9,691	..	..	
	Total ..	10,824	16·91	..	..	10,824	16·91		
North Malabar.	Wynaad	214,400	335·00	..	..	214,400	335·00	..	
South Malabar.	Pâlghat	150	·23	..	..	150	·23	..	
South Canara.	....	..	..	..	..	..	..	..	
	Grand Total ..	1,053,448	1,646·01	62,795	193,734	922,509	1,441·42		

Abstract.

District.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.
Chingleput	14,812	23·15	15,712	13,470	17,054	26·65
North Arcot	..	..	..	..	..	..
South Arcot	502,190	784·67	..	170,264	331,926	518·63
Salem	216,311	337·99	..	10,000	206,311	322·36
Trichinopoly	..	..	26,598	..	26,598	41·56
Tanjore	6,081	9·50	20,485	..	26,566	41·50
North Coimbatore	..	..	..	..	..	..
South Coimbatore	1,312	2·05	..	..	1,312	2·05
Madura	87,368	136·51	..	..	87,368	136·51
Tinnevelly	10,824	16·91	..	..	10,824	16·91
North Malabar	214,400	335·00	..	..	214,400	335·00
South Malabar	150	·23	..	..	150	·23
South Canara	..	..	..	..	..	..
Total ..	1,053,448	1,646·01	62,795	193,734	922,509	1,441·42

Annual Form No. 60.

Forest Department, Madras, Southern Circle.

Area of Plantations, 1889-90.

District.	Number of plantations.	On 1st April 1889.		Added during 1889-90.		On 31st March 1890.	
		Area.	Cost.	Area.	Cost.	Area.	Cost.
Regular plantations—		ACS.	RS.	ACS.	RS.	ACS.	RS.
Chingleput	6	396·09	30,887	..	929	396·09	31,816
North Arcot	5	1,035	93,957	..	4,473	1,035	98,430
South Arcot	15	1,785·05	1,03,235	76	2,664	1,861·05	1,05,899
Salem	..	..	..	..	..	..	..
Trichinopoly	22	3,754·01	87,006	..	3,145	3,754·01	90,151
Tanjore	5	708	12,755	..	1,200	708	13,955
North Coimbatore	1	97	33,124	..	1,029	97	34,153
South Coimbatore	3	19·5	4,455	7	355	26·5	4,810
Madura	8	63·64	10,566	21·50	2,626	85·14	13,192
Tinnevelly	..	..	..	..	..	..	..
North Malabar	1	41·50	3,711	..	347	41·50	4,058
South Malabar	16	3,729·75	2,33,927	140	7,866	3,869·75	2,41,793
South Canara	3	163·19	21,737	6·99	979	170·18	22,716
Total ..	85	11,792·73	6,35,360	251·49	25,613	12,044·22	6,60,973
Cultural operations—							
Direction	..	..	1,141	..	..	..	1,141
Chingleput	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	..
South Arcot	3	1,326	1,017	..	310	1,326	1,327
Salem	..	..	..	..	..	..	..
Trichinopoly	10	mls. 100	28,995	..	600	mls. 100	29,595
Tanjore	20	1,071	1,740	55	233	1,126	1,973
North Coimbatore	..	..	..	..	..	..	..
South Coimbatore	..	..	..	..	..	..	..
Madura	..	..	..	..	..	..	..
Tinnevelly	7	1,340·93	2,183	301·50	827	1,642·43	3,010
North Malabar	2	109	1,618	..	332	109	1,950
South Malabar	..	..	..	..	..	..	..
South Canara	..	..	38	..	..	..	38
Total ..	42	3,846·93 mls. 100	36,732	356·50	2,302	4,203·43 mls. 100	39,034

Annual Form No. 61.

Forest Department, Madras, Southern Circle.

Annual List of Topes and Experimental gardens, 1889-90.

District.	Number.	Area.	Cost		Remarks.
			During year.	To end of year.	
		ACS.	RS.	RS.	
Chingleput	8	93	241	8,215	
North Arcot	640	743	1,243	32,319	
South Arcot	94	394	45	8,757	
Salem	263	3,061	1,048	1,97,642	
Trichinopoly	17	81	..	1,779	
Tanjore	16	153	..	..	
North Coimbatore	183	* 14,030	96	28,875	*The previous year's return showed 10 acres in excess due to clerical error in the District Forest office.
South Coimbatore	7	103	..	5,208	
Madura	23	101	1,649	14,838	
Tinnevelly	28	106	264	4,490	
North Malabar	1	20	155	2,765	
South Malabar	2	3	..	9	
South Canara	..	..	..	..	
Total ..	1,282	18,888	4,741	3,04,897	

Annual Form No. 62.

Forest Department, Madras, Southern Circle.

Area of forest tracts protected from fire during 1889-90.

District.	Forest tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.			
	Tiruvallúr Range.	Acs.	Rs. A. P.	Acs.	Acs.	Acs.	Rs. A. P.	Rs. A. P.		
Chingleput ..	Kambakkam hills	14,951	2,600 9 11	14,951	..	14,951	364 2 0	2,964 11 11	1883-84	
	Nagalapuram hills	8,339	165 5 1	8,345	2	8,343	185 3 4	350 8 5	1887-88	
	Total ..	23,290	2,765 15 0	23,296	2	23,294	549 5 4	3,315 4 4		
	Specially Protected.									
	Pólúr Range.									
	Karnatic ghur	6,469	1,533 2 11	7,069	..	7,069	160 0 0	1,693 2 11	1881	
	Vellore Range.									
	Tellaí	15,095	1,621 6 2	15,121	200	14,921	140 0 6	1,761 6 8	1881	
	Ambúr fuel	3,840	1,301 0 8	3,840	..	3,840	143 8 0	1,444 8 8	1879	
	Palamadi	6,400	538 14 0	6,400	260	6,140	56 0 0	594 14 0	1880	
	Chandragiri Range.									
	Napier	8,772	1,508 4 1	8,772	..	8,772	290 15 6	1,799 3 7	1880	
	Mámandúr	1,776	1,443 3 9	1,776	90	1,686	159 13 4	1,603 1 1	1874	
	Chamala	9,437	344 1 2	9,600	960	8,640	65 15 0	410 0 2	1880	
	Panapauk	6,400	304 1 11	6,400	200	6,200	79 5 4	383 7 3	1880	
	Pudipatlabail	2,560	282 8 9	2,560	..	2,560	50 10 8	333 3 5	1880	
North Arcot ..	Mámandúr extension	8,000	24 1 6	8,000	..	8,000	11 0 0	35 1 6	1888	
	Chittoor Range.									
	Paradarami	15,242	296 5 6	15,042	..	15,042	25 15 10	322 4 10	1880	
	Airala	6,385	227 10 0	16,130	10	16,120	27 15 10	255 9 10	1880	
	Chittoor	360	193 5 4	360	..	360	11 15 11	205 5 3	1882	
	Santapet	2,276	65 6 11	2,276	..	2,276	4 0 0	69 6 11	1882	
	Bommasamudram	1,426	156 7 8	..	..	..	..	156 7 8	1884	Included in Chittaparai block.
	Chilapalli	1,296	82 15 8	1,296	..	1,296	10 9 2	93 8 10	1884	
	Kinatipalli	1,417	54 13 8	1,417	..	1,417	11 15 11	66 13 7	1884	
	Chittaparai	4,850	3 6 10	4,850	..	4,850	13 15 11	17 6 9	1888	
	Bassavapalli	2,027	3 6 10	2,027	..	2,027	11 15 11	15 6 9	1888	
	Mohimundalam	2,522	3 6 10	2,522	..	2,522	11 15 11	15 6 9	1888	
	Penumore	6,400	2 0 0	6,400	..	6,400	11 15 11	13 15 11	1888	
	Pachiguntah	1,800	2 0 0	1,800	..	1,800	11 15 11	13 15 11	1888	
	Vrisettipalli	7,587	2 9 0	7,587	..	7,587	25 15 10	28 8 10	1888	

Area of forest tracts protected from fire during 1889-90—*cont.*

District.	Forest tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.			
	Palmanér Range.	ACS.	RS. A. P.	ACS.	ACS.	ACS.	RS. A. P.	RS. A. P.		
North Arcot—*cont.*	Mortana	16,000	809 13 8	16,000	30	15,970	163 7 5	973 5 1	1884	
	Musalimadugu	9,600	268 1 0	9,600	90	9,510	53 9 6	321 10 6	1884	
	Peddur	8,320	652 10 1	9,600	180	9,420	69 5 2	721 15 3	1880	
	Basvireddipalli	10,240	248 8 4	10,240	..	10,240	37 9 6	286 1 10	1884	
	Naikeneri	6,093	626 7 10	6,400	80	6,320	69 5 2	695 13 0	1884	
	Chargul	19,200	12 0 0	19,200	..	19,200	27 11 8	39 11 8	1888	
	Peddinayanadrug	12,800	12 0 0	12,800	..	12,800	40 13 1	52 13 1	1888	
	Gudiyátam Range.									
	Ambúr drug	5,760	141 15 0	5,760	..	5,760	27 11 8	169 10 8	1880	
	Gundlaputty	..	..	8,420	..	8,420	16 0 0	16 0 0	1890	
	Arcot Range.									
	Punganúr	3,621	1,559 8 2	3,630	351	3,279	163 5 8	1,722 13 10	1884	
	Javadi Hill Range.									
	Putrokod block	19,200	795 10 11	19,200	..	19,200	2 10 8	798 5 7	1881	
	Putúr do.	12,800	420 5 5	12,800	..	12,800	10 6 4	430 11 9	1879	
	Virappanur do.	64,000	45 0 0	64,000	..	64,000	25 0 0	70 0 0	1886	
	Malayalam do.	12,600	53 4 0	12,800	..	12,800	36 6 4	89 10 4	1887	
	Wálajáh Range.									
	Ammanur	203	3 2 0	203	..	203	..	3 2 0	1880	
	Banavaram	1,051	53 0 0	1,051	..	1,051	..	53 0 0	1880	
	Total ..	323,885	15,696 1 1	342,949	2,451	340,498	2,081 2 7	17,777 3 8		
	General Protection.									
	Pólúr Range	14,863	..	40,366	..	40,366	..	..		
	Vellore do.	30	..	43,630	..	43,630	..	..		
	Chandragiri do.	16,250	..	47,610	..	47,610	..	..		
	Gudiyátam do.	1,148	16 8 11	45,128	..	45,128	..	16 8 11		
	Palmanér do.	61	..	61	..	61	..	..		
	Arcot do.	6,784	..	6,784	..	6,784	..	..		
	Wandiwash do.	11,171	..	11,171	..	11,171	..	..		
	Wállajáh do.	10,328	..	10,328	700	9,628	..	..		
	Total ..	60,635	16 8 11	205,078	700	204,378	..	16 8 11		
	Total of the District ..	384,520	15,712 10 0	548,027	3,151	544,876	2,081 2 7	17,793 12 7		

Area of forest tracts protected from fire during 1889-90—*cont.*

District.	Forest tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.			
	Tiruvannámalai Range.	ACS.	RS. A. P.	ACS.	ACS.	ACS.	RS. A. P.	RS. A. P.		
South Arcot ..	Annamalai reserved forest ..	1,610	..	2,640	220	2,420	93 12 7	..	1878	
	Kavuttimalai	5,997	..	10,032	189	9,843	223 3 5	..	1878	
	Tenmalai	19,620	..	50,428	200	50,228	592 4 6	..	1877	
	Mudinai reserved forest	..	..	6,464	..	6,464	16 8 0	..	1883	
	Valasamalai	7,000	..	12,738	5	12,733	66 13 2	..	1883-84	
	Damarakadu	..	..	..	..	..	1 1 0	..	1884	
	Chinnasamudram	..	..	..	..	..	..	..	1878	
	Perunkolatturswamimalai reserved forest and Nattampalli.	11,000	..	9,312 7,333	.. 309	9,312 7,024	103 11 4	..	1889	
	Pelamaradur	8,000	..	9,148	150	8,998	..	..	1889	
	Nallapattur	7,000	..	6,748	250	6,498	102 5 0	..	1889	
	Kallakurchi Range.									
	Tagarai	15,000	..	15,400	..	15,400	220 5 1	..	1889	
	Total ..	75,227	5,075	130,243	1,323	128,920	1,420 0 0	6,495 0 0		
Salem	*Salem Range.*									
	Vadugampatti block, No. I ..	1,976	1,865 6 9	1,976	200	1,776	255 8 9	2,120 15 6	1881	Renewed tracing, 15 miles.
	Morur block, No. II	799	872 12 11	799	18	781	77 1 2	949 14 1	1881	Do. 5½ miles.
	Mallapuram block, No. III ..	587	952 7 4	587	..	587	79 9 0	1,032 0 4	1881	First tracing, 2¼ miles. Renewed tracing, 5 miles.
	Ammaneri block, No. VIII ..	252	367 1 4	252	..	252	78 1 4	445 2 8	1882	Do. 4¼ ,,
	Pillapallikombai block, No. VII.	981	617 12 10	981	100	881	43 0 8	660 13 6	1882	Do. 6 ,,
	Kariyappakombai do. VI.	531	473 3 8	531	..	531	58 3 6	531 7 2	1882	Do. 4 ,,
	Kangeri block, No. XII	1,929	648 12 8	1,929	..	1,929	121 14 8	770 11 4	1882	Do. 9½ ,,
	Pannikaradu block, No. XIV ..	2,645	1,388 13 9	2,645	..	2,645	99 14 5	1,488 12 2	1883	Do. 10½ ,,
	Karuvattuparai do. XV ..	837	886 12 5	837	10	827	53 13 9	940 10 2	1884	Do. 6½ ,,
	Putting out fire in Kurumbapatti reserve.	..	2 2 6	..	..	..	..	2 2 6	..	
	Uttankarai Range.									
	Uttankarai block, No. IX ..	469	609 4 11	469	..	469	75 6 0	684 10 11	1881	Renewed tracing, 6 miles.
	Singarapet do. X ..	2,624	1,738 6 3	2,624	..	2,624	184 5 5	1,922 11 8	1881	Do. 12 ,,
	Harur do. XI ..	1,176	983 8 7	1,176	..	1,176	113 15 8	1,097 8 3	1882	Do. 8¾ ,,
	Tirupatúr Range.									
	Kotur block, No. XXI	1,213	246 5 1	1,213	..	1,213	61 5 6	307 10 7	1885	Do. 5½ ,,

Area of forest tracts protected from fire during 1889-90—*cont.*

District.	Forest tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expected.			
	Krishnagiri Range.	ACS.	RS. A. P.	ACS.	ACS.	ACS.	RS. A. P.	RS. A. P.		
	Burgur block, No. IV	220	370 8 8	220	..	220	86 3 9	456 12 5	1883	Renewed tracing, 4 miles.
	Pudúr, No. V	1,069	863 11 5	1,069	..	1,069	92 2 0	955 13 5	1883	Do. 6 ,,
	Tograpalli, No. XIII	499	194 5 11	499	..	499	45 6 8	239 12 7	1884	Do. 4½ ,,
	Hosúr Range.									
Salem—*cont.* ..	Melgiri block, No. XVI ..	5,461	550 15 3	5,461	..	5,461	78 0 0	628 15 3	1885	Do. 13½ ,,
	Kanavoikottapalle block, No. XVII.	742	181 3 2	742	..	742	28 0 0	209 3 2	1885	Do. 4 ,,
	Gulhatti block, No. XVIII ..	3,248	406 3 8	3,248	..	3,248	83 0 0	489 3 8	1885	Do. 11 ,,
	Munchi do. XIX ..	3,305	409 11 5	3,305	..	3,305	86 0 0	495 11 5	1885	Do. 10 ,,
	Kanavanagasamudram block, No. XX.	416	186 10 7	416	..	416	28 0 0	214 10 7	1885	Do. 4 ,,
	Total ..	30,979	14,816 5 1	30,979	328	30,651	1,829 0 3	16,645 5 4		First tracing, 2¼ miles. Renewed tracing 155½ mls.
	Musiri Range.									
	Sengattupatti	3,000	126 0 0	3,000	170	2,830	31 0 0	157 0 0	1885-86.	
	Manmalai	3,000	111 0 0	3,000	..	3,000	26 0 0	137 0 0	1887-88.	
	Kanapadi, T.	11,890	49 0 0	12,000	..	12,000	19 0 0	68 0 0	1887-88.	
	Karuppankadu	1,500	34 0 0	2,000	..	2,000	8 0 0	42 0 0	1887-88.	
	Melúr	3,000	168 0 0	3,000	..	3,000	32 0 0	200 0 0	1885-86.	
	Kanapadi, V	10,000	76 0 0	10,000	50	9,950	41 0 0	117 0 0	1887-88.	
Trichinopoly ..	Palamalai	10,000	60 0 0	10,000	..	10,000	98 0 0	158 0 0	1888-89.	
	Kaiyammankoil tittu	..	..	1,500	..	1,500	83 0 0	83 0 0	1889-90.	
	Kannimarsolai	..	..	2,650	..	2,650	9 0 0	9 0 0	1889-90.	
	Perambalúr Range.									
	Manalodai	..	48 0 0	..	..	..	..	48 0 0	1885-86.	
	Salamatti	7,000	1,187 0 0	7,000	..	7,000	56 0 0	1,243 0 0	1885-86.	
	Valaiyur	..	4 0 0	1,600	..	1,600	71 0 0	75 0 0	1888-89.	
	Total ..	49,390	1,863 0 0	55,750	220	55,530	474 0 0	2,337 0 0		
Tanjore	Tanjore	..	..	..	..	..	..	..		
	Kollegál Range.									
	I, Jadatallahulla	361	310 7 8	361	(*a*) 22	339	48 1 3	358 8 11	1884-85.	
	II, Udayárpálaiyam	297	297 14 6	297	..	297	24 7 0	322 5 6	1884-85.	(*a*) & (*b*) confined to grass land only.
North Coimbatore	III, Baliur	1,186	508 4 2	1,186	(*b*) 5	1,181	34 12 11	543 1 1	1879-80.	
	Satyamangalam Range.									
	IV, Gairmalai	..	42 11 0	520	..	520	11 2 4	53 13 4		
	Total ..	1,844	1,159 5 4	2,364	27	2,337	118 7 6	1,277 12 10		

Area of forest tracts protected from fire during 1889-90—*cont.*

District.	Forest tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.			
	Satyamangalam Range—cont.	Acs.	Rs. A. P.	Acs.	Acs.	Acs.	Rs. A. P.	Rs. A. P.		
South Coimbatore.	No. I Tunakaduvu Range ..	23,650	2,490 6 0	24,000	..	24,000	455 7 0	2,945 13 0	1882-83	
	,, II Pollachi do. ..	..	82 0 0	..	..	..	70 2 0	152 2 0	1888-89	
	,, III Punachi do. ..	3,140	1,464 8 0	3,140	..	3,140	214 9 6	1,679 1 6	1882-83	
	,, IV Udamalpet do. ..	485	329 4 0	485	..	485	47 9 2	376 13 2	1883-84	
	,, VII Bolampatti do. ..	16,557	1,325 0 0	16,557	15	16,542	350 13 0	1,675 13 0	1884-85	
	,, VIII Sholakarai do. ..	3,000	1,579 12 0	3,000	..	3,000	191 8 9	1,771 4 9	1883-84	
	Cost of badges purchased for fire-patrols.	..	..	..	..	..	111 1 5	111 1 5		
	Total ..	46,832	7,270 14 0	47,182	15	47,167	1,441 2 10	8,712 0 10		
	Special Protection.									
	Reserved Forests.									
	No. I.—Uttamapalaiyam Range.									
	Vannatiparai	27,481	1,359 13 2	27,482	640	26,842			1884-85	
	Suranganár	3,566		3,616	250	3,366			1885-86	
	Melagudalur	1,280	1,179 3 0	1,280	..	1,280	884 6 10	3,423 7 0	1885-86	
	Pandavatorai	300		300	..	300			1886-87	
	Machakál	2,310		2,560	5	2,555			1886-87	
	No. II.—Kodaikánal Range.									
	Pambár	4,745	3,415 14 0	4,755	710	4,045	373 11 4	3,789 9 4	1883-84	
	Sengalvarai Ar	5,194	601 11 6	5,210	..	5,210	123 15 6	725 11 0	1885-86	
	Pumbarai and Vilpati valley ..	13,587	1,335 7 6	13,587	..	13,587	192 2 2	1,527 9 8	1885-86	
	Kudirai Ar and Kukkal	19,704	694 2 4	19,705	60	19,645	246 12 0	940 14 4	1886-87	
	Oliyanattu Oddai	3,200	20 0 0	3,200	..	3,200	..	20 0 0	1888-89	
Madura ..	Perumalmalai	12,800	2,141 9 3	12,800	..	12,800	465 5 3	2,606 14 6	1883-84	
	Amburuvi	3,840	50 1 11	3,840	5	3,835	..	50 1 11	1886-87	
	Arunkanal	2,560	549 6 6	2,560	..	2,560	52 0 0	601 6 6	1883-84	Transferred from reserved lands.
	Kallár	9,600	864 1 6	9,600	..	9,600	270 0 0	1,134 1 6	1885-86	
	No. III.—Dindigul Range.									
	Sirumalai	25,289	1,897 11 6	25,029	500	25,029	376 8 0	2,274 3 6	1885-86	
	Mudimalai	6,086	635 6 5	6,086	..	6,086	140 0 0	775 6 5	1884-85	
	No V.—Alagar Hill.									
	Alagarmalai	17,394	6,865 4 2	17,510	63	17,447	524 7 6	7,389 11 8	1882-83	

Area of forest tracts protected from fire during 1889-90—*cont.*

District.	Forest tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.			
	RESERVED LANDS.	ACS.	RS. A. P.	ACS.	ACS.	ACS.	RS. A. P.	RS. A. P.		
	No. II.—Kodáikánal Range.									
	Mudugamalai fuel and fodder Reserve.	3,227	900 11 11	3,227	..	3,227	24 0 0	927 11 11	1884-85	
	No. III.—Dindigul Range.									
	Karandamalais	22,400	33 2 0	22,400	..	22,400	..	33 2 0	1887-88	
	Panjantangi	3,200	41 12 0	3,200	..	3,200	..	41 12 0	1887-88	
	No. IV.—Mettupatti Range.									
Madura—*cont.* ..	Waggatumalai fuel and fodder reserve.	4,200	725 1 10	4,200	..	4,200	133 15 4	859 1 2	1884-85	
	Kachakatti do. do. ..	1,694	30 0 0	1,694	..	1,694	..	..		
	Total of Special Protection ..	193,657	23,340 8 6	194,341	2,233	192,108	3,807 3 11	27,147 12 5		
	GENERAL PROTECTION.									
	No. II.—Kodáikánal Range ..	110	93 2 8	110	..	110	78 8 8	171 11 4		
	Total of the District ..	193,767	23,433 11 2	194,451	2,233	192,218	3,885 12 7	27,319 7 9		
	SPECIAL PROTECTION.									
	SOUTHERN RANGE.									
	Ambásamudram Taluk.									
	i, Block between Sruveyar and Kariyar rivers, Pápanásam hills.	10,477	3,170 8 9	10,477	..	10,477	540 5 6	3,710 14 3	1884-85	
	ii, Block between Surveyar and, Karumpandi Teri and Mutri Mottai.	1,200	1,096 9 6	1,200	..	1,200	385 15 11	1,482 9 5	1885-86	
Tinnevelly ..	iii, Alwar Kurchi block	7,690	1,322 0 2	7,690	..	7,690	423 6 0	1,745 6 2	1886-87	
	iv, Surveyar-Kariyar extension at the foot of the hills.	1,920	554 4 10	1,920	..	1,920	194 3 4	748 8 2	1887-88	
	v, Kadayam block	..	..	3,500	640	2,860	378 4 0	378 4 0	1889-90	
	vi, Kariyar block	..	..	2,000	..	2,000	188 2 0	188 2 0	1889-90	
	vii, Vandalodai	..	..	1,500	..	1,500	283 5 9	283 5 9	1889-90	

Area of forest tracts protected from fire during 1889-90—*cont.*

District.	Forest tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.			
	Nánguméri Taluk.	ACS.	RS. A. P.	ACS.	ACS.	ACS.	RS. A. P.	RS. A. P.		
Tinnevelly—*cont.*	viii, Block of forests in the Kalakad hills.	7,820	1,658 14 11	7,820	..	7,820	163 2 7	1,822 1 6	1885-86	
	ix, Do. do. ..	..	1,439 11 8	12,160	..	12,160	223 4 4	1,633 0 0	1886-87	
	x, Vadagarai block	..	..	2,000	..	2,000	146 2 5	146 2 5	1889-90	
	CENTRAL RANGE.									
	Tenkási Taluk.									
	i, Kuttalam block	5,120	684 7 2	5,120	594	4,526	210 3 8	894 10 10	1887-88	
	ii, Kodiyanallur	2,560	372 5 9	2,560	300	2,260	370 5 4	742 11 1	1887-88	
	iii, Boundary between Chokampatti and Government forests.	..	145 0 0	..	..	..	..	145 0 0	1885-86	
	iv, Boundary between Viranankulam and Government Forests.	..	310 0 0	..	..	..	..	310 0 0	1885-86	
	Sankaranainárkoil Taluk.									
	i, Boundary line between Tirumalai Naicken, Pudukudi mittah and Government forests.	..	30 0 0	..	..	..	..	30 0 0	1885-86	
	ii, Puliangudi and Chintamani blocks.	37,292	850 5 7	37,292	..	37,292	694 12 9	1,545 2 4	1888-89	
	NORTHERN RANGE.									
	Srivilliputur Taluk.									
	i, Chinna Ooty block	..	..	500	..	500	56 0 0	56 0 0	1889-90	
	ii, Pulikamuthu do.	..	..	500	..	500	64 12 0	64 12 0	1889-90	
	Total of Special Protection ..	74,079	11,634 4 4	96,239	1,534	94,705	4,322 5 7	15,956 9 11		
	GENERAL PROTECTION.									
	Northern Range	..	14 10 10	..	..	..	14 6 8	29 1 6	1889-90	
	Central do.	..	11 8 4	..	..	..	6 4 0	17 12 4	1889-90	
	Southern do.	..	26 6 6	..	..	..	43 12 0	70 2 6	1889-90	
	Total of General Protection ..	..	52 9 8	..	..	..	64 6 8	117 0 4		

Area of forest tracts protected from fire during 1889-90—*cont.*

District.	Forest tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.			
	General Protection—*cont.*	Acs.	Rs. A. P.	Acs.	Acs.	Acs.	Rs. A. P.	Rs. A. P.		
Tinnevelly—*cont.*	Deduct amount disallowed by the Examiner under this sub-head in the accounts for March 1890.	..	..	..	..	..	5 0 0	5 0 0		
	Total of the District ..	74,079	11,686 14 0	96,239	1,534	94,705	4,381 12 3	16,068 10 3		
North Malabar.	Begur	5,122	4,002 0 0	15,366	..	15,366	764 0 0	4,381 0 0	1882-83	
	Kurchiyat	..	491 0 0	18,054	..	18,054	275 0 0	766 0 0	1887-88	
	Add miscellaneous expenditure as per Examiner's accouut.	..	..	..	..	..	13 0 0	13 0 0		
	Total of the District ..	5,122	4,493 0 0	33,420	..	33,420	1,052 0 0	5,545 0 0		
	Nilambúr Range.									
South Malabar ..	Amarampalaiyam Reserve ..	408	377 0 0	468	..	468	58 0 0	435 0 0	1860-61	
	Chathamborai do. ..	700	323 0 0	700	..	700	40 0 0	363 0 0	1872-73	
	Teak plantations do. ..	2,702	2,273 0 0	2,853	..	* 2,853	436 0 0	2,709 0 0	1842-43	* Inclusive of the new blocks I to IV.
	Amarampalaiyam Range.									
	Karimpoya reserve	3,955	742 0 0	3,955	..	3,955	119 0 0	861 0 0	1884-85	
	Nellikutta do.	1,824	664 0 0	1,824	..	1,824	73 0 0	737 0 0	1883-84	
	New Amarampalaiyam forest ..	..	..	16,000	..	16,000	131 0 0	131 0 0	1889-90	
	Pálghat Range.									
	Walayar Reserve	2,962	4,822 0 0	3,017	217	2,800	394 0 0	5,216 0 0	1873-74	
	Chenat Nair	15,153	1,247 0 0	15,203	..	15,203	379 0 0	1,626 0 0	1884-85	
	Total of the District ..	27,704	10,448 0 0	44,020	217	43,803	1,630 0 0	12,078 0 0		
	Coondapoor Range.									
South Canara ..	Sabladi	208	124 4 9	208	..	208	53 2 7	177 7 4	1884-85,	
	Sarpanamanekadu and Goligundiguddi reserved lands.	150	83 1 8	150	..	150	55 13 6	138 15 2	1886-87 & 88	
	Udipi Range.									
	Pillarkan	320	108 2 0	320	..	320	20 0 0	128 2 0	1883-84,	
	Chinkramale	2,558	632 9 9	2,560	90	2,470	376 11 4	1,009 5 1	1885-86 & 87	
	Manajikadu	423	349 14 7	423	..	423	103 15 0	453 13 7	1886-87	
	Tenkahola	2,039	382 3 1	2,039	..	2,039	161 7 0	543 10 1	1886-87	

Area of forest tracts protected from fire during 1889-90—*cont.*

District.	Forest tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.			
	Mangalore Range.	ACS.	RS. A. P.	ACS.	ACS.	ACS.	RS. A. P.	RS. A. P.		
South Canara—*cont.*	Chembugudde	75	24 1 3	75	..	75	2 15 0	27 0 3	1884-85	
	Kuttiyar	25	14 14 9	25	..	25	2 10 0	17 8 9	1884-85	
	Poitagikayarpalle	96	28 11 4	96	..	96	5 11 0	34 6 4	1885-86	
	Hosabattu	..	..	376	15	361	47 1 5	47 1 5	1889-90	
	Todar	..	..	457	5	452	38 10 3	38 10 3	1889-90	
	Uppinangadi Range.									
	Darmastalamandaji reserve ..	9,596	460 7 10	9,600	19	9,581	463 13 5	924 5 3	1887-88 & 89.	
	Kásaragód Range.									
	Parappa	52	146 13 4	52	..	52	.. *	146 13 4	..	* Rs. 11-1-0 incurred and not paid within the year.
	Total of the District ..	15,542	2,355 4 4	16,381	129	16,252	1,331 14 6	3,687 2 10	..	
	Total of Special Protection ..	867,551	1,00,917 9 8	1,017,164	8,479	1,008,685	20,051 10 6	12,069 4 2	..	
	Total of General Protection ..	60,745	162 5 3	205,188	700	204,488	142 15 4	305 4 7	..	
	Grand Total ..	928,296	1,01,079 14 11	1,222,352	9,179	1,213,173	20,194 9 10	1,21,274 8 9	..	

Abstract.

Chingleput ..	....	23,290	2,766 0 0	23,296	2	23,294	549 0 0	3,315 0 0	
North Arcot ..	....	384,520	15,713 0 0	548,027	3,151	544,876	2,081 0 0	17,794 0 0	
South Arcot ..	....	75,227	5,075 0 0	130,243	1,323	128,920	1,420 0 0	6,495 0 0	
Salem	....	30,979	14,816 0 0	30,979	328	30,651	1,829 0 0	16,645 0 0	
Trichinopoly ..	....	49,390	1,863 0 0	55,750	220	55,530	474 0 0	2,337 0 0	
Tanjore	....	..	..	..	..	..	..	..	
North Coimbatore ..	....	1,844	1,159 0 0	2,364	27	2,337	119 0 0	1,278 0 0	
South Coimbatore ..	....	46,832	7,271 0 0	47,182	15	47,167	1,441 0 0	8,712 0 0	
Madura	....	193,767	23,434 0 0	194,451	2,233	192,218	3,885 0 0	27,319 0 0	
Tinnevelly ..	....	74,079	11,687 0 0	96,239	1,534	94,705	4,382 0 0	16,069 0 0	
North Malabar ..	....	5,122	4,493 0 0	33,420	..	33,420	1,052 0 0	5,545 0 0	
South Malabar ..	....	27,704	10,448 0 0	44,020	217	43,803	1,630 0 0	12,078 0 0	
South Canara ..	....	15,542	2,355 0 0	16,381	129	16,252	1,332 0 0	3,687 0 0	
	Total ..	928,296	1,01,080 0 0	1,222,352	9,179	1,213,173	20,194 0 0	1,21,274 0 0	

Charged in previous years	81,027 0 0
Do. 1888-89	20,053 0 0
Do. 1889-90	20,194 0 0
Total ..	1,21,274 0 0

ANNUAL FORM No. 63.

Prosecutions for Breaches of Forest Rules during 1889-90.

District.	Cases pending from 1888-89.	New cases of the year.					Total cases.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1	2	3	4	5	6	7	8
Chingleput	..	..	86	..	6	92	92
North Arcot	5	3	180	55	17	255	260
South do.	50	7	171	168	84	430	480
Salem	60	5	320	131	14	470	530
Trichinopoly	41	..	501	45	100	646	687
Tanjore	9	..	43	2	6	51	60
North Coimbatore	..	3	10	10	14	37	37
South do.	3	1	23	63	20	107	110
Madura	13	5	20	1	2	28	41
Tinnevelly .. Under Forest Act ..	..	6	27	5	7	45	45
Tinnevelly .. Under Penal Code ..	5	1	33	1	1	36	41
North Malabar	2	1	13	14	20	48	50
South Malabar. Under Forest Act ..	..	..	4	..	16	20	20
South Malabar. Under Penal Code ..	..	..	3	..	..	3	3
South Canara	19	2	375	..	34	411	430
Total ..	207	34	1,809	495	341	2,679	2,886

District.	Disposed of during the year.										Cases pending at close of year.
	Convictions.		Acquittals.		Compounded.		Withdrawn.		Total.		
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons	Cases.	Persons.	Cases.	Persons.	
	9	10	11	12	13	14	15	16	17	18	19
Chingleput	51	123	39	78	2	5	..	..	92	206	..
North Arcot ..	37	74	67	196	149	320	..	..	253	590	7
South do. ..	86	260	25	93	220	644	16 (a) 28	38	347 28	1,035	105
Salem	284	911	86	455	88	360	43	185	501	1,911	29
Trichinopoly ..	90	149	31	96	488	920	..	..	609	1,165	78
Tanjore	23	42	10	42	23	34	..	..	56	118	4
North Coimbatore ..	13	32	6	20	10	20	1	17	30	89	7
South do. ..	16	47	4	10	74	278	4	6	98	341	12
Madura	24	86	17	63	..	..	..	..	41	149	..
Tinnevelly. Under Forest Act ..	19	51	26	80	..	..	..	..	45	131	..
Tinnevelly. Under Penal Code ..	28	57	8	23	..	..	..	..	36	80	5
North Malabar ..	13	52	7	54	30	65	..	..	50	171	..
South Malabar. Under Forest Act ..	18	28	1	8	..	..	..	..	19	36	1
South Malabar. Under Penal Code ..	2	5	..	..	..	..	..	..	2	5	1
South Canara ..	200	240	58	90	103	104	..	..	361	434	69
Total ..	904	2,157	385	1,308	1,187	2,750	64 28	246	2,540 28	6,461	318

(a) Believed to have been disposed of by Village Magistrate and no reliable information could be had.

ANNUAL FORM No. 64.

Forest Department, Madras, Southern Circle.

Summary of Revenue of the different Districts, 1889-90.

Budget heads.	Direction.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
RECEIPTS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the Forests by Government Agency—															
(*a*) Timber	..	..	3,711	3,206	813	202	..	..	18,772	4,725	8,194	11,256	36,951	11,731	99,561
(*b*) Firewood and charcoal ..	..	3,951	32,830	5,676	306	15,755	509	..	1,920	3,574	13,759	..	652	2,024	80,956
(*c*) Bamboos	..	..	165	..	120	16	..	..	..	..	528	..	1,108	8	1,945
(*d*) Sandalwood ..	..	..	5,688	1,385	5,679	..	..	194	..	..	..	..	..	..	12,946
(*e*) Grass and other minor produce ..	..	..	..	35	..	55	..	..	4,444	31	2,604	272	156	21,843	29,440
II. Timber and other produce removed from the Forests by consumers or purchasers—															
(*a*) Timber	..	5,548	44,044	3,850	28,383	9,185	620	7,147	6,980	30,000	8,258	2,585	2,641	2,028	1,51,769
(*b*) Firewood and charcoal ..	..	7,049	39,366	31,142	26,013	10,576	5,447	6,839	12,799	8,821	26,660	..	5,026	6,090	1,85,828
(*c*) Bamboos	..	324	20,132	4,396	26,922	3,977	214	11,086	5,664	3,329	787	384	1,038	851	79,104
(*d*) Grazing and fodder grass ..	..	2,087	4,466	2,683	12,016	6,358	739	23,091	10,341	2,321	158	..	115	..	64,375
(*e*) Other minor produce	..	3,307	24,639	42,405	34,306	6,378	4,274	35,874	6,523	34,541	16,152	3,388	376	3,352	2,15,515
III. Confiscated, Drift and Waifwood	..	19	431	153	729	33	3	220	126	153	366	82	2	358	2,675
IV. Revenue from Forests not managed by Government	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V. Miscellaneous—															
(*a*) Fines and forfeitures	..	..	..	12	24	..	..	..	4	..	167	4	208	..	419
(*b*) Refunds	706	142	421	1,427	571	136	6	518	310	212	1,364	523	93	245	6,674
(*c*) Other sources ..	7	95	1,966	2,918	1,490	4,766	224	356	1,269	325	663	3,359	1,068	1,304	19,810
Total ..	713	22,522	1,77,859	99,288	1,37,872	57,437	12,036	85,325	69,152	88,032	79,660	21,853	49,434	49,834	9,51,017

MADRAS,
18th June 1889.

(Signed) G. HOMFRAY,
Ag. Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras, Southern Circle.

Summary of expenditure of the different districts, 1889-90.

Budget heads.	Direction.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
A.—Conservancy and Works.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—															
(*a*) Timber	..	..	2,717	1,813	975	34	..	..	5,433	2,703	4,829	1,687	8,282	10,065	38,538
(*b*) Firewood and charcoal	..	..	17,193	2,155	205	7,932	278	..	1,219	2,391	3,029	..	3	972	35,377
(*c*) Bamboos	..	..	103	..	70	3	..	..	..	..	113	..	..	9	298
(*d*) Sandalwood	..	..	1,052	378	778	..	..	..	..	..	..	..	..	..	2,208
(*e*) Grass and other minor produce	..	..	259	5	..	1	..	..	3,082	..	1,037	175	75	14,790	19,424
II. Timber and other produce removed from the forests by consumers or purchasers	783	1,163	6,931	2,365	10,648	2,403	598	9,542	3,411	4,155	3,180	..	30	3,812	49,021
III. Confiscated, drift and waif-wood	..	..	32	45	37	1	..	1	1	3	11	..	1	3	135
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests, and payments to shareholders in forests managed by Government	..	..	..	..	10	..	..	..	2,500	..	..	..	511	..	3,021
VI. Live stock, stores, tools and plant—															
(*a*) Purchase of cattle	..	..	..	..	..	..	..	..	31	100	..	1,303	2,592	..	4,026
(*b*) Feed and keep of cattle	..	..	..	7	44	772	..	..	2,241	645	..	1,626	3,840	..	9,175
(*c*) Stores, tools and plant	586	5	948	38	344	174	..	57	541	337	86	62	296	154	3,628
VII. Communications and buildings—															
(*a*) Roads and bridges	..	75	839	2,030	..	910	..	834	6,295	3,438	2,185	491	742	..	17,839
(*b*) Buildings	..	320	1,488	1,675	395	247	10	1,671	867	5,295	2,410	1,858	1,307	109	17,652
(*c*) Other works	..	1	..	72	..	..	..	..	146	..	..	127	2	98	446
VIII. Demarcation, improvement and extension of forests—															
(*a*) Demarcation	..	1,729	686	669	3,790	144	27	3,106	175	404	1,062	429	186	890	13,297
(*b*) Compensation for land and rights	12	161	178	51	306	182	..	..	..	768	..	405	..	..	2,063
(*c*) Surveys and working plans.	69,108	..	..	..	364	36	10	60	13	3,049	1,550	6	..	972	75,168
(*d*) Plantations	..	1,170	5,715	3,019	1,048	3,746	1,433	1,125	356	4,275	1,091	834	7,866	979	32,657
(*e*) Protection from fire	..	549	2,081	1,420	1,329	474	..	121	1,441	3,886	4,381	1,052	1,630	1,332	20,196
(*f*) Other works	..	1,874	5,674	4,949	6,248	4,455	1,931	961	750	..	3,951	97	767	406	32,063
IX. Miscellaneous—															
(*a*) Refunds	..	80	9	2,484	3,879	31	268	50	8	448	5	899	..	310	8,471
(*b*) Law charges	..	..	34	8	47	2	3	21	41	..	33	8	..	25	222
(*c*) Other charges	..	64	1	9	94	..	2	61	15	122	197	27	32	37	661
Total, A. Conservancy and Works	70,489	7,191	45,940	23,192	31,111	21,547	4,560	17,610	28,566	32,019	29,150	11,086	28,162	34,963	3,85,586

MADRAS,
18th June 1890.

(Signed) G. HOMFRAY,
Acting Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras, Southern Circle.

Summary of Expenditure of the different districts, 1889-90.

Budget heads.	Direction.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
B.—Establishments.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward—Total A.—Conservancy and Works ..	70,489	7,191	45,940	23,192	31,111	21,547	4,560	17,610	28,566	32,019	29,150	11,086	28,162	34,963	3,85,586
I. Salaries—															
(*a*) Conservators ..	12,651	..	..	..	..	..	..	..	..	..	..	..	..	..	12,651
(*b*) Superior officers ..	14,591	2,967	3,912	5,205	11,352	4,248	1,197	10,552	7,800	9,605	8,198	7,952	10,216	6,227	1,04,022
(*c*) Subordinate Forest and depôt establishments ..	2,074	3,761	11,198	9,962	11,887	5,041	1,315	6,764	8,726	6,974	6,767	4,485	4,638	5,495	89,087
(*d*) Office establishments	19,644	1,253	2,704	2,756	2,939	1,797	588	3,047	2,935	2,128	2,534	2,510	1,552	2,116	48,503
(*e*) Deputation and Special allowances.	1,162	..	..	..	..	..	..	..	..	..	..	..	..	..	1,162
II. Travelling Allowances—															
(*a*) Conservators ..	3,392	..	..	..	..	..	..	..	..	..	..	..	..	..	3,392
(*b*) Superior officers ..	3,226	1,028	929	1,195	1,322	575	21	1,341	1,589	1,905	1,574	1,682	883	807	18,077
(*c*) Subordinate Forest and depôt establishments ..	524	886	3,421	2,401	3,399	1,465	351	2,440	2,565	1,679	2,023	1,014	1,476	1,305	24,949
(*d*) Office establishments	2,811	147	275	382	341	128	40	285	274	382	345	111	107	175	5,803
III. Contingencies—															
(*a*) Stationery	25	..	2	..	7	..	..	..	..	..	..	6	..	4	44
(*b*) Carriage of tents and records ..	654	55	128	176	114	32	10	154	46	167	191	6	..	237	2,020
(*c*) Rents, rates and taxes	..	1	..	453	53	276	..	51	40	13	21	..	..	1	909
(*d*) Pay of Police guards.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(*e*) Official postage ..	977	206	534	687	962	364	111	491	285	435	567	155	144	713	6,631
(*f*) Sundries	1,184	160	403	746	329	56	23	248	167	207	255	200	81	133	4,192
Total B.—Establishment ..	62,915	10,464	23,506	23,963	32,705	14,032	3,656	25,373	24,427	23,495	22,475	18,121	19,097	17,213	3,21,442
Grand Total of Expenditure ..	1,33,404	17,655	69,446	47,155	63,816	35,579	8,216	42,983	52,993	55,514	51,625	29,207	47,259	52,176	7,07,028

MADRAS,
18th June 1890.

(Signed) G. HOMFRAY,
Ag. Examiner of Forest Accounts.

ANNUAL FORM No. 65.

Forest Department, Madras, Southern Circle.

Outstandings and liabilities on account of contractors and disbursers for 1889-90.

District.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Conservator of Forests, Southern Circle ..	..	2,689 0 10	2,689 0 10	84 7 8	2,675 7 2	2,759 14 10	70 14 0	..
Three-fifths of Examiner's office	..	811 13 11	811 13 11	7 0 10	1,268 5 11	1,275 6 9	463 8 10	..
Forest Settlement-officer, Chingleput, &c.	..	330 6 7	330 6 7	37 0 3	293 6 4	330 6 7	..	..
Forest Settlement-officer, Salem, &c. ..	..	306 5 9	306 5 9	..	596 14 5	596 14 5	290 8 8	..
Forest school, Dehra Dun	..	40 0 0	40 0 0	86 0 0	40 0 0	126 0 0	86 0 0	..
Chingleput	..	7,381 1 6	7,381 1 6	131 1 10	7,301 8 9	7,432 10 7	51 9 1	..
North Arcot	..	49,595 10 1	49,595 10 1	37 11 3	49,793 14 6	49,831 9 9	235 15 8	..
South Arcot	..	35,994 11 11	35,994 11 11	2,554 8 11	34,120 9 7	36,675 1 11	680 6 0	..
Salem	..	50,881 6 9	50,881 6 9	792 7 10	50,439 7 0	51,231 14 10	350 8 1	..
Trichinopoly	..	27,940 10 8	27,940 10 8	847 11 9	27,171 5 3	28,019 1 0	78 6 4	..
Tanjore	..	6,248 15 6	6,248 15 6	15 7 10	6,279 14 1	6,295 5 11	46 6 5	..
North Coimbatore ..	..	25,174 10 11	25,174 10 11	835 2 9	25,013 8 3	25,848 11 0	674 0 1	..
South Coimbatore ..	..	24,322 6 2	24,322 6 2	963 9 3	24,784 11 3	25,748 4 6	1,425 14 4	..
Madura	..	60,197 13 1	60,197 13 1	1,276 12 5	61,791 8 2	63,068 4 7	2,870 7 6	..
Tinnevelly	..	46,187 2 0	46,187 2 0	2,653 8 0	45,792 12 3	48,446 4 3	2,259 2 3	..
North Malabar ..	..	7,478 0 5	7,478 0 5	953 15 7	7,491 6 9	8,445 6 4	967 5 11	..
South Malabar ..	..	13,257 0 6	13,257 0 6	896 15 3	12,807 4 4	13,704 3 7	447 3 1	..
South Canara	..	34,731 13 5	34,731 13 5	9,339 2 5	37,689 10 5	47,028 12 10	12,296 15 5	..
Total ..	..	3,93,569 2 0	3,93,569 2 0	21,512 11 3	3,95,351 10 5	4,16,864 5 8	23,295 3 8	..

MADRAS,
18th June 1890.

(Signed) G. HOMFRAY,
Acting Examiner of Forest Accounts.

ANNUAL FORM No. 66.

Forest Department, Madras, Southern Circle.

Revenue received and outstandings on account of revenue during 1889-90.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Direction	Timber and other produce.	..	712 7 3	712 7 3	712 7 3	..
Chingleput		..	22,521 3 8	22,521 3 8	22,521 3 8	..
North Arcot		2,521 0 10	1,76,129 7 11	1,78,650 8 9	1,77,859 7 8	791 1 1
South Arcot		125 0 0	1,00,332 1 6	1,00,457 1 6	99,288 1 5	1,169 0 1
Salem		959 5 0	1,39,544 3 6	1,40,503 8 6	1,37,872 4 2	2,631 4 4
Trichinopoly		3,015 8 2	56,619 4 5	59,634 12 7	57,436 14 10	2,197 13 9
Tanjore		..	12,630 6 10	12,630 6 10	12,036 6 10	594 0 0
North Coimbatore		2,750 3 5	84,180 12 2	86,930 15 7	85,325 3 2	1,428 7 7
					(a)+ 177 4 10	
South Coimbatore		2,774 12 1	69,507 13 2	72,282 9 3	69,152 3 3	805 13 1
					(b)+2,324 8 11	
Madura		1,539 7 11	88,197 11 3	89,737 3 2	88,032 1 6	1,260 6 11
					(c)+ 444 10 9	
Tinnevelly		1,739 15 6	78,895 9 4	80,635 8 10	79,659 11 0	975 13 10
North Malabar		1,391 0 0	21,932 11 2	23,323 11 2	21,852 11 2	1,471 0 0
South Malabar		476 8 0	49,015 6 4	49,491 14 4	49,433 14 4	58 0 0
South Canara		1,623 5 0	50,941 4 3	52,569 9 3	49,834 1 9	1,118 15 6
					(d)+1,616 8 0	
	Total ..	(e) 18,921 1 11	(f)9,51,160 6 9	9,70,081 8 8	9,55,579 12 6	(g) 14,501 12 2

(a) Written off the accounts as per Board's Proceedings, dated 16th September 1889, No. 637.
(b) Do. do. as per G.O., dated 1st May 1889, communicated in Board's Proceedings, dated 11th June 1889, No. 398.
(c) Do. do. as per G.O., dated 22nd August 1889, contained in Board's Proceedings, dated 16th September 1889, No. 637.
(d) Do. do. —*vide* Board's Proceedings, No. 1107, dated 20th November 1889.

MADRAS,
18th June 1890.

(Signed) G. HOMFRAY,
Acting Examiner of Forest Accounts.

	RS. A. P.	RS. A. P.
Under budget head I	6,482 2 8	4,635 5 4
Do. do. II	12,438 13 3	9,866 4 10
Do. do. V	0 2 0	0 2 0
Total (e) ..	18,921 1 11	(g) 14,501 12 2

(f) *Note by Conservator.*—The amount as per Forms Nos. 71, 72-A and 72-B and revenue under head V as per Form No. 64 is Rs. 9,46,210. The difference is apparently due to the Examiner having treated an advance of Rs. 5,000 from timber merchants in North Malabar as value of sales effected during the year (which it is not) and to the omission to write off Rs. 51 and odd, being value of 8 tons of fuel in Trichinopoly sanctioned to be written off the accounts.

ANNUAL FORM No. 67.

Forest Department, Madras, Southern Circle.

Financial results of the year 1889-90.

District.	TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY.		OTHER REVENUE.		FORMATION, PROTECTION AND IMPROVEMENT OF FORESTS.	TOTAL.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Direction	..	..	713	..	..	713	..
Chingleput	3,951	1,113	18,571	6,317	9,003	22,522	16,433
North Arcot	42,394	37,608	1,35,465	42,386	35,193	1,77,859	1,15,187
South Arcot	10,302	9,445	88,986	29,199	22,507	99,288	61,151
Salem	6,918	4,403	1,30,954	50,063	28,979	1,37,872	83,445
Trichinopoly	16,028	15,178	41,409	13,530	17,295	57,437	46,003
Tanjore	509	471	11,527	3,897	5,355	12,036	9,723
North Coimbatore ..	194	1,082	85,131	33,654	14,907	85,325	49,643
South Coimbatore ..	25,136	25,511	44,016	19,551	13,753	69,152	58,815
Madura	8,330	12,859	79,702	28,739	27,584	88,032	69,182
Tinnevelly	25,085	19,109	54,575	19,350	24,358	79,660	62,817
North Malabar ..	11,528	9,739	10,325	4,697	6,848	21,853	21,284
South Malabar ..	38,867	28,863	10,567	3,817	19,468	49,434	52,148
South Canara	35,606	40,700	14,228	8,758	11,739	49,834	61,197
Total ..	2,24,848	2,06,081	7,26,169	2,63,958	2,36,989	9,51,017	7,07,028

Annual Form No. 68.

Forest Department, Madras, Southern Circle.

Trees felled by Government Agency during the year 1889-90.
(Selection fellings.)

	Teak.	Rosewood.	Vengai.	Other timbers.	Sandal-wood.	Total.
	NO.	NO.	NO.	NO.	NO.	NO.
Stock of the circle at the beginning of the year ..	..	8	..	343	..	351
Chingleput	..	..	..	..	..	..
North Arcot	..	..	..	1,033	..	1,033
South Arcot	..	..	413	1,358	..	1,771
Salem	..	..	..	831	330	1,161
Trichinopoly	..	..	..	550	..	550
Tanjore	..	..	..	..	..	..
North Coimbatore	..	..	..	..	..	..
South Coimbatore	327	44	42	103	..	516
Madura	28	28	73	..	..	129
Tinnevelly	..	..	..	123	..	123
North Malabar	691	74	32	..	..	797
South Malabar	8	97	8	691	..	804
South Canara	18	11	2	153	..	184
Total number of trees during the year by selection felling	1,072	254	570	4,842	330	7,068
Total ..	1,072	262	570	5,185	330	7,419
Converted into logs, &c., and shown in form No. 69	1,054	249	568	4,916	330	7,117
Balance on hand at the end of the year	18	13	2	269	..	302

Annual Form No. 69.

Forest Department, Madras, Southern Circle.

Statement of timber and other produce cut and collected by Government Agency during the year 1889-90.

	Timbers.						Fuel.	Bamboos.	Sandal-wood.	Minor produce.
	Teak.	Rose-wood.	Vengai.	Other timbers.	Redwood roots.	Total timbers.				
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NOS.	C. FT.	MDS.
Stock of the Circle at the beginning of the year ..	47,057	7,975	1,388	48,480	..	104,900	32,949	3,467	..	2,343
Chingleput	..	..	..	..	..	..	50,370	..	..	..
North Arcot	..	..	..	5,910	11,957	17,867	309,853	2,000	1,038	..
South Arcot	..	..	1,055	5,228	..	6,283	36,769	1	630	304
Salem	..	..	..	924	..	924	4,403	1,888	1,054	..
Trichinopoly	..	..	..	8,350	..	8,350	244,170	129	..	8
Tanjore	..	..	..	..	..	..	7,881	..	..	..
North Coimbatore ..	..	..	..	..	..	..	..	..	..	..
South Coimbatore ..	18,176	1,804	2,123	7,623	..	29,726	15,154	..	..	1,729
Madura	456	1,296	5,848	5	..	7,605	36,612	..	..	6
Tinnevelly	42	..	..	6,352	..	6,394	136,726	4,730	..	264
North Malabar	31,157	2,668	1,132	..	..	34,957	..	..	..	20
South Malabar	22,212	3,278	627	28,319	..	54,336	6,420	14,511	..	31
South Canara	..	161	28	11,131	..	11,320	19,116	500	..	18,007
Collection during the year for the Circle	72,043	9,207	10,713	73,842	11,957	177,762	867,474	23,759	2,702	20,369
Total ..	119,100	17,182	12,101	122,322	11,957	282,662	900,423	27,226	2,702	22,712
Sold in the forest ..	15,722	8,766	7,712	52,360	20	84,580	798,280	12,325	507	12,010
Used departmentally, wastage written off, &c. ..	4,938	793	587	3,113	..	9,431	424	466	30	95
Removed to sale depôts ..	26,232	1,512	1,740	13,021	11,937	54,442	79,370	10,818	2,074	432
Total disposal ..	46,892	11,071	10,039	68,494	11,957	148,453	878,074	23,609	2,611	12,537
Stock in the forest on 31st March 1890	72,208	6,111	2,062	53,828	..	134,209	22,349	3,617	91	10,175

ANNUAL FORM No. 70.

Forest Department, Madras, Southern Circle.

Receipts and issues of timber and other produce in sale depôts during the year 1889-90.

	Timbers.									
	Teak.	Rosewood.	Vengai.	Other timbers.	Redwood roots.	Total timbers.	Fuel.	Bamboos.	Sandalwood.	Minor produce.
	C. FT.	C. FT	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Stock of the Circle at sale depôts at the beginning of the year ..	35,679	73	15	3,681	19,250	58,698	24,863	6,409	1,573	104
Chingleput	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	..	11,937	11,937	7,007	..	1,038	..
South Arcot	..	..	1,004	1,437	..	2,441	..	..	2	..
Salem	..	..	..	924	..	924	..	1,888	1,034	..
Trichinopoly	..	..	..	842	..	842	57,812	..	..	..
Tanjore	..	..	..	..	..	..	..	..	..	..
North Coimbatore	..	..	..	..	..	..	..	..	..	..
South Coimbatore	7,278	1,341	708	255	..	9,582	..	..	..	236
Madura	..	..	..	..	..	..	11,771	..	..	..
Tinnevelly	..	..	..	660	..	660	..	..	..	170
North Malabar	..	..	..	..	..	..	..	..	..	..
South Malabar	18,954	..	..	..	..	18,954	2,780	8,930	..	26
South Canara	..	171	28	8,903	..	9,102	..	..	..	..
Total received from forests into the sale depôts during the year ..	26,232	1,512	1,740	13,021	11,937	54,442	79,370	10,818	2,074	432
Receipts from one sale depôt into another	1,586	..	..	..	..	1,586	..	..	..	39
Quantity found in depôts in excess of original measurement in the forests	51	..	..	1,800	..	1,851	58	..	..	3
Total receipts, including previous year's stock	63,548	1,585	1,755	18,502	31,187	116,577	104,291	17,227	3,647	578
Sold from depôts	33,253	1,280	1,699	16,190	5,612	58,034	76,765	12,410	1,746	510
Removed from one sale depôt into another	1,586	..	..	..	..	1,586	..	..	..	39
Quantity used departmentally, wastage, written off, &c.	1,467	..	56	158	..	1,681	18,420	117	..	10
Total disposals ..	36,306	1,280	1,755	16,348	5,612	61,301	95,185	12,527	1,746	559
Balance at end of the year ..	27,242	305	..	2,154	25,575	55,276	9,106	4,700	1,901	19

Annual Form No. 71.

Forest Department, Madras, Southern Circle.

Sales of Timber and other produce cut and collected by Government Agency during the year 1889-90.

District.	Timber.										Total Timber.			
	Teak.		Rosewood.		Vengai.		Other timber.		Redwood roots.		From depôt.		From forest.	
	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	Quantity.	Amount.	Quantity.	Amount.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	RS.	C. FT.	RS.
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	..	5,910	5,612	20	5,612	1,855	5,930	1,951
South Arcot	..	..	..	..	963	51	1,349	3,290	..	..	2,312	2,107	3,341	1,099
Salem	..	..	..	..	..	..	1,009	..	..	..	1,009	813	..	..
Trichinopoly	..	..	..	..	..	..	189	7,473	..	..	189	30	7,473	172
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Coimbatore	12,246	408	1,036	..	708	442	97	87	..	..	14,087	17,025	937	1,841
Madura	..	396	..	1,356	..	5,560	..	5	..	..	..	..	7,317	5,057
Tinnevelly	..	42	..	..	..	..	681	6,614	..	..	681	106	6,656	8,103
North Malabar	..	11,618	..	3,775	..	1,132	..	..	..	..	..	..	16,525	6,256
South Malabar	21,007	3,258	..	3,278	..	527	..	27,362	..	..	21,007	23,135	34,425	13,341
South Canara	..	..	244	357	28	..	12,865	1,619	..	..	13,137	10,585	1,976	1,146
Total ..	33,253	15,722	1,280	8,766	1,699	7,712	16,190	52,360	5,612	20	58,034	55,656	84,580	38,966

Sales of Timber and other produce cut and collected by Government Agency during the year 1889-90—*cont.*

District.	Fuel.				Bamboos.				Sandalwood.				Minor produce.			
	From depôt.		From forest.		From depôt.		From forest.		From depôt.		From forest.		From depôt.		From forest.	
	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
	C. FT.	RS.	C. FT.	RS.	NO.	RS.	NO.	RS.	C. FT.	RS.	C. FT.	RS.	MDS.	RS.	MDS.	RS.
Chingleput	..	..	50,370	3,951	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	7,036	1,280	302,846	29,710	..	..	2,000	165	741	5,688	..	..	..	..	..	..
South Arcot	..	..	38,942	5,551	..	..	1	..	88	350	507	2,204	..	..	292	35
Salem	..	..	4,403	285	2,888	143	..	..	880	5,679	..	..	..	..	..	..
Trichinopoly	58,300	5,014	188,974	10,568	..	..	96	16	..	..	..	..	..	..	145	55
Tanjore	..	..	7,881	659	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore	..	..	..	..	..	..	..	..	37	194	..	..	..	..	..	..
South Coimbatore	..	..	15,154	1,920	..	..	..	..	..	..	..	..	236	916	1,536	3,789
Madura	7,509	1,271	27,261	2,313	..	..	..	..	..	..	..	..	..	..	6	31
Tinnevelly	..	..	136,726	13,556	..	..	4,730	527	..	..	..	..	256	2,413	146	192
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	272
South Malabar	3,920	490	3,640	220	9,522	836	4,948	272	..	..	..	..	18	131	1	24
South Canara	..	..	22,083	2,076	..	..	550	9	..	..	..	..	..	..	9,871	22,242
Total ..	76,765	8,055	798,280	70,809	12,410	979	12,325	989	1,746	11,911	507	2,204	510	3,460	12,010	26,640

	Quantity sold.		Sold from depôt.	Sold from forest.
			RS.	RS.
I (*a*)	C. Ft.	142,614	55,656	38,966
I (*b*)	C. Ft.	875,045	8,055	70,809
I (*c*)	No.	24,735	979	989
I (*d*)	C. Ft.	2,253	11,911	2,204
I (*e*)	Mds.	12,520	3,460	26,640
		Total ..	80,061	1,39,608

Grand total of sales during the year both from depôts and forests	2,19,669
Add outstandings due from previous year as per Form No. 66	6,482
Do. amount received as advance on account of sale of timber in North Malabar	5,000
Total ..	2,31,151
Deduct amount of previous year's outstanding written off	* 1,668
Do. amount realized during the year as per Form No. 64	2,24,848
Balance outstanding on 31st March 1890 as per Form No. 66	4,635

* Includes Rs. 51 value of 8 tons of fuel in Trichinopoly sanctioned by the Conservator to be written off the accounts.

Annual Form No. 72-A.

Forest Department, Madras, Southern Circle.

Timber and other produce cut and collected and removed by consumers or purchasers during 1889-90.

District.	Timber.	Firewood and charcoal.	Bamboos.	Money value of sales.											
				Timber.		Firewood.		Bamboos.		Grazing and fodder grass.		Minor produce.		Total.	
				Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.
	C. FEET.	C. FEET.	NO.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Chingleput	48,800	153,838	5,079	5,548	5,548	7,049	7,049	324	324	2,087	2,087	3,307	3,307	18,315	18,315
North Arcot	332,940	1,074,534	1,419,400	44,053	44,044	39,291	39,366	20,213	20,132	4,466	4,466	24,639	24,639	1,32,662	1,32,647
South Arcot	41,398	716,972	53,753	3,850	3,850	31,142	31,142	4,396	4,396	2,683	2,683	42,405	42,405	84,476	84,476
Salem	382,022	1,668,334	1,877,000	28,883	28,883	26,013	26,013	27,478	26,922	11,823	12,016	35,614	34,306	1,29,811	1,28,140
Trichinopoly	133,102	633,132	318,000	9,238	9,185	10,576	10,576	3,977	3,977	6,334	6,358	5,755	6,378	35,880	36,474
Tanjore	7,911	144,842	17,200	620	620	5,809	5,447	214	214	739	739	4,356	4,274	11,738	11,294
North Coimbatore ..	56,831	322,153	801,400	7,147	7,147	6,839	6,839	11,086	11,086	23,091	23,091	34,730	35,874	82,893	84,037
South Coimbatore ..	67,708	837,953	453,200	6,980	6,980	12,799	12,799	5,664	5,664	10,341	10,341	6,523	6,523	42,307	42,307
Madura	452,017	463,575	266,400	28,747	30,000	8,821	8,821	3,329	3,329	2,321	2,321	35,619	34,541	78,837	79,012
Tinnevelly	61,168	458,862	62,800	8,252	8,258	26,282	26,660	786	787	158	158	15,960	16,152	51,438	52,015
North Malabar ..	321	..	25,396	2,585	2,585	..	..	384	384	..	..	3,467	3,388	6,436	6,357
South Malabar ..	30,045	239,000	99,992	2,641	2,641	5,026	5,026	1,038	1,038	115	115	376	376	9,196	9,196
South Canara ..	34,105	317,291	59,629	2,028	2,028	6,090	6,090	851	851	..	..	4,007	3,352	12,976	12,321
Total ..	1,648,368	7,030,486	5,459,249	1,50,572	1,51,769	1,85,737	1,85,828	79,740	79,104	64,158	64,375	2,16,758	2,15,515	6,96,965	6,96,591

ANNUAL FORM No. 72-B.

Forest Department, Madras, Southern Circle.

Timber and other produce confiscated and sold during the year 1889-90.

District.	Timber.	Fuel.	Bamboos.	Sandal-wood.	Minor produce in money value.	Total amount of sales.	Amount actually realized.
	C. FT.	C. FT.	NO.	C. FT.	RS.	RS.	RS.
Chingleput	211	25	..	..	1	19	19
North Arcot	827	575	1,405	..	22	431	431
South Arcot	274	776	..	..	31	153	153
Salem	5,840	4,209	8,417	31	13	729	729
Trichinopoly	247	394	..	..	1	33	33
Tanjore	40	20	..	..	..	3	3
North Coimbatore	1,848	420	550	11	3	220	220
South Coimbatore	180	859	463	..	1	126	126
Madura	1,122	324	120	..	15	153	153
Tinnevelly	241	1,304	..	..	26	366	366
North Malabar	50	..	..	..	79	82	82
South Malabar	..	..	100	..	..	2	2
South Canara	4,578	391	40	..	..	358	358
Total ..	15,458	9,297	11,095	42	192	2,675	2,675

ANNUAL FORM No. 73-A.

Forest Department, Madras, Southern Circle.

ABSTRACT showing the value of timber and other produce at sale depôts for the year 1889-90.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.
				RS.			RS.	RS.	RS.
Chingleput ..	....	..	..	..	..	..	..	..	..
North Arcot ..	Redwood roots and stumps.	Tons. lb. 385 0	19,250	5,775	..	25,575	7,672	1,897	..
	Babul and casuarina wood.	11 100	442	22	..	410	20	..	2
	Sandalwood roots	16 779	817	1,308	..	1,114	1,782	474	..
	Total ..	412 879	20,509	7,105	..	27,099	9,474	2,369	..
South Arcot ..	Vengai poles	No. 4	15	15	..	..	..	..	15
	Miscellaneous timber ..	98	67·1	34	1	2·4	1	..	33
	Firewood	Tons. lbs. 2 8	138	10	..	..	..	..	10
	Sandalwood roots and billets.	1 1,582	90	528	Tons lb. 0 144	4	13	..	515
	Total ..	3 1,590 / No. 102	310·1	587	0 144 / No. 1	6·4	14	..	573
Salem ..	Sandalwood	Mds. lb. 1,209 18½ / Tons. lb. =12-1,302	629	3,975	Mds. lb. 1,401 20½	783	5,382	1,407	..
	Miscellaneous timber ..	No. 9	85	85	..	..	..	..	85
	Bamboos	1,000	..	15	..	..	..	..	15
	Total ..	No. 9 / 1,000 / Tons. lb. 12 1,302	85 / 629	4,075	Mds. lb. 1,401 20½	783	5,382	1,207	..

Abstract showing the value of timber and other produce at sale depôts for the year 1889-90—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.
				Rs.			Rs.	Rs.	Rs.
Trichinopoly ..	Miscellaneous timber ..	..	..	..	653	..	81	81	..
	Firewood	..	1,600 = 40 Tons.	145	..	1,112	95	..	50
	Total ..	Tons. 40	1,600	145	No. 653	1,112	176	31	..
Tanjore ..	....	..	..	..	..	..	..	..	..
North Coimbatore.	Sandalwood	lb. 1,823	4½	190	..	..	..	..	190
South Coimbatore.	Teak logs	485	17,616	13,210	317	12,139	9,103	..	4,107
	Teak rafters	55	976	549	..	..	..	..	549
	Teak scantlings	..	..	..	184	156	390	390	..
	Rosewood	..	..	..	14	305	184	184	..
	Miscellaneous timber ..	4	113	56	9	265	151	95	..
	Total ..	544	18,705	13,815	524	12,865	9,828	..	3,987
Madura ..	Firewood	Tons. lb. 60 1,711	2,431	228	..	6,693	750	342	..
Tinnevelly ..	Miscellaneous timber ..	4	21	21	..	..	..	..	21
	Minor produce	Tons. lb. 1 110	Mds. lb. 93 12	902	..	lb. 24	4	..	898
	Total ..	4 Mds. 93	21 12	923	..	lb. 24	4	..	919
North Malabar.	....	..	..	..	..	..	..	..	..
South Malabar.	Miscellaneous timber ..	30	1,234	770	30	1,234	770	..	..
	Teak saplings	20,709	17,087	22,000	22,619	14,947	18,000	..	4,000
	Karyas	2,031	..	50	340	..	10	..	40
	Bamboos	5,409	..	400	4,700	..	300	..	100
	Minor produce	lb. Mds. 250 = 10	..	100	lb. 450	Mds. 18	200	100	..
	Total ..	No. 7,440 / 20,739	18,321	23,320	No. 5,040 / 22,649	16,180	19,280	..	4,040
		10 Mds.			18 Mds.				
South Canara.	Rosewood	2	72·9	80	..	..	..	..	80
	Miscellaneous logs ..	91	2,161·4	1,825	..	..	..	..	1,825
	Total ..	93	2,234·3	1,905	..	..	..	..	1,905
	GRAND TOTAL.								
	Teak	540	18,592	13,759	501	12,295	9,493	..	4,266
	Teak saplings	20,709	17,087	22,000	22,619	14,947	18,000	..	4,000
	Vengai	4	15	15	..	..	..	..	15
	Rosewood	2	72·9	80	14	305	184	104	..
	Redwood roots, &c. ..	Tons. 385	19,250	5,775	..	25,575	7,672	1,897	..
	Miscellaneous timber ..	No. 236	3,681·6	2,791	40 / 653	1,501·4	1,003	..	1,788
	Firewood	Tons. lb. 113 1,819	4,611	405	..	8,215	865	463	..
	Rectification	..	..	— 3	..	..	..	..	..
	Firewood	No. 2,031	..	50	No. 340	..	10	..	40
	Bamboos	8,440	..	415	5,040	..	310	..	105
	Sandalwood	Tons. lb. 31 1,006	1,540½	6,001	Tons. lb. 15 1,589	1,901	7,177	1,176	..
	Minor produce	Mds. lb. 103 12	..	1,002	Mds. lb. 18 24	..	204	..	798
		..	..	52,290	..	..	44,918	..	7,372

ANNUAL FORM NO. 73-B.

Forest Department, Madras, Southern Circle.

ABSTRACT showing the value of Live-stock, Stores, Tools and Plant for the year 1889-90.

District.	SURVEYING, &c., INSTRUMENTS.				TOOLS.				MACHINERY.				FURNITURE.			
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		RS.		RS.		RS.		RS.		RS.		RS.		RS.		RS.
Chingleput	19	329	19	329	197	478	202	483	..	..	..	..	26	293	40	395
North Arcot	34	832	34	784	789 cwt. 32-94	1,222	826 cwt. 32-94	1,946	2	(a) 9,893	2	(a) 9,398	85	483	79	424
South Arcot	67	1,274	67	1,274	524	302	549	316	7	271	7	271	158	988	187	1,513
Salem	46	558	52	604	209	884	270	1,184	..	..	..	..	16	115	17	128
Trichinopoly	6	325	8	407	1,141	1,222	983	1,136	..	..	..	..	61	480	61	480
Tanjore	20	..	21	..	155	16	175	16	..	..	..	..	20	..	20	..
North Coimbatore	14	55	18	82	1,012	1,256	846	1,092	..	..	..	..	183	190	259	190
South Coimbatore	49	59	51	59	528	..	534	..	..	42,447	..	42,447	206	49	242	49
Madura	23	491	23	491	146	387	244	634	..	..	..	..	112	432	127	530
Tinnevelly	33	755	33	755	307	511	324	562	..	..	..	..	277	1,469	284	1,483
North Malabar	33	407	33	407	35	194	38	206	..	..	..	..	2	1	4	26
South Malabar	11	198	10	322	814	483	713	452	19	99	17	105	38	149	37	149
South Canara	40	..	36	..	419	..	371	..	1	..	1	..	98	..	103	..
Total ..	395	5,283	405	5,514	6,276 cwt. 32-94	6,955	6,045 cwt. 32-94	8,027	29	52,710	27	52,221	1,282	4,649	1,460	5,367

(a) Includes cost of tramway materials.

Abstract showing the value of Live-stock, Stores, Tools and Plant for the year 1889-90—*cont.*

District.	Buildings.				Live-stock.				Miscellaneous.				Total.					
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		Difference in value.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	In favor of the year.	Against the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.
Chingleput	3	425	4	608	..	..	..	..	..	..	..	..	245	1,525	265	1,815	290	..
North Arcot	40	3,516	40	3,340	..	..	..	..	..	..	..	..	950 cwt. 32-94	15,946	981 cwt. 32-94	15,892	..	54
South Arcot	10	3,865	10	4,301	..	..	..	..	432	1,386	433	1,370	1,198	8,086	1,253	9,045	959	..
Salem	3	75	3	75	..	..	..	..	7	28	7	28	281	1,660	349	2,019	359	..
Trichinopoly	9	1,555	9	1,585	12	537	4	172	222	609	220	460	1,451	4,728	1,285	4,240	..	488
Tanjore	4	323	4	322	..	..	..	..	21	17	21	17	220	356	241	355	..	1
North Coimbatore ..	33	2,750	33	3,520	..	..	..	..	..	..	..	..	1,242	4,251	1,156	4,884	633	..
South Coimbatore ..	36	157	36	157	4	7,700	(*b*) 5	7,700	37	..	81	..	860	50,412	949	50,412	..	..
Madura	82	4,982	86	10,093	6	120	6	120	..	..	..	..	369	6,412	456	11,868	5,456	..
Tinnevelly	74	7,682	77	9,575	..	..	..	..	..	..	..	..	691	10,417	718	12,375	1,958	..
North Malabar ..	8	1,567	8	1,567	3	4,500	4	6,100	27	220	27	220	108	6,889	114	8,526	1,637	..
South Malabar	19	13,407	22	14,290	8	6,702	8	6,702	168	747	156	923	1,077	21,785	963	22,943	1,158	..
South Canara	17	170	20	170	..	..	..	..	237	..	207	..	812	170	738	170	..	..
Total ..	338	40,474	352	49,603	33	19,559	27	20,794	1,151	3,007	1,152	3,018	9,504 cwt. 32-94	1,32,637	9,468 cwt. 32-94	1,44,544	11,907	..

(*b*) One not valued.

ANNUAL FORM No. 74.

Forest Department, Madras.

Statement of Elephants in the Southern Circle during the year 1889-90

PART I.

Elephants in possession of the reporting officers throughout the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep including servants and food.		Remarks.
	Elephants.			RS. A. P.	
South Coimbatore.	1. Sankara 2. Chloe 3. Parvathi 4. Karthyayani	28th June 1888. Arrived from North Malabar. August 1888. Arrived from South Malabar.	Per head ..	38 10 1	
North Malabar..	1. Phyllis 2. Lakshmi	Purchased in January 1878. Transferred from Anaimalais in 1881.	Per head ..	44 3 1	
South Malabar..	1. Vixen 2. Peyru 3. Sampson 4. Eva 5. Juno 6. Jupiter 7. Thebaw 8. Mars 9. Maharaj 10. Jembu 11. Gordon 12. Rani	....	Per head ..	27 0 8	
	Other cattle.				
Trichinopoly ..	Four bullocks	April 1885 and 1886 ..	Per head ..	5 13 4	
Madura ..	1. Two Kodaikânal bulls 2. Two Navinipatti garden bulls.	Purchased in 1885 .. Do. in 1886 ..	Per head ..	9 7 11	

PART II.

Elephants received in the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of keep including servants and food.		Remarks.
	Elephants.			RS. A. P.	
South Coimbatore.	Rani	May 1889. Purchased in South Malabar.	..	38 10 1	
North Malabar..	1. Peri .. .. .. 2. Lalameah .. .. 3. Chenchilpeary .. 4. Kalyani	Captured in April 1889 .. Do in March 1889 .. Purchased from the Commissariat Department in May 1889. Purchased from Mr. Saunders, Superintendent of Keddas, Mysore in October 1889.	Per head ..	24 4 6	
South Malabar..	1. Elizabeth .. .. 2. Jessy .. .. .. 3. Eddy .. .. .. 4. Mary	Captured in January 1890. Do. in ,, ,, Do. in February 1890. Do. in March 1890 ..	Per head ..	32 13 1	
	Other cattle.				
Trichinopoly ..	....	*Nil.* ..			
Madura	Two bulls for Gundon sholah depôt.	Purchased in December 1889.	Per head ..	9 7 11	

PART III.

Elephants gone off the list during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of keep including servants and food.	RS. A. P.	How disposed of.
	Elephants.				
South Coimbatore.	.... ..	*Nil.* ..	..	..	
North Malabar.	1. Leila	Captured in April 1888 ..	Per head ..	38 8 4	Sold in November 1889 for Rs. 661.
	2. Chenchilpeary ..	Purchased from the Commissariat Department in May 1889.			Died in December 1889.
	Other cattle.				
Trichinopoly	Seven bullocks	....	Per head ..	8 10 6	Sold for Rs. 286 in November 1889.
	One bullock				Died.
Madura	Two Kodaikánal dépôt ponies.	Purchased in 1887 ..	..	9 7 11	Sold in September 1889 for Rs. 105.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE NORTHERN CIRCLE, MADRAS,

FOR THE YEAR 1889-90.

By A. W. PEET, Esq., Acting Conservator of Forests.

CHAPTER I.

Introductory Remarks.

The circle was throughout the year in charge of Mr. J. Sykes Gamble, the Conservator, who made extensive tours and visited all the districts, inspecting all the offices except that of Kurnool.

2. The offices of the District Forest-officers of Godávari, Kurnool, Anantapur and Nílgiris were inspected by the Deputy Collectors of those districts, and notes sent to the Board of Revenue.

3. The following list shews the distribution and movements of the officers in charge of the District Forests:—

Abstract A.—Distribution and movements of Officers.

Districts.	Names of officers in charge.	Number of days in charge.	Number of days in camp.	Percentage of days in camp.	Reasons for absence of permanent officer.
Ganjam	Mr. A. W. Lushington, Deputy Conservator.	293	191	65	Privilege leave for 45 days from 19th May to 3rd July 1889; and 10 days from 6th to 15th January 1890.
	,, W. R. Newman, Forest Ranger.	47	47	100	
	,, A. W. B. Higgens, Acting Collector.	25	2	8	
Vizagapatam, North.	,, A. W. Lushington, Deputy Conservator.	267	..	..	
	Conservator	23	..	..	
	Collector	58	..	..	
	Mr. C. D. A. McArthy, Assistant Conservator.	17	8	47	
Vizagapatam, South.	,, J. S. Battie, Assistant Conservator.	254	..	..	
	,, G. Homfray do. ..	92	..	..	
	,, C. D. A. McArthy do. ..	19	..	..	
Godávari ..	,, J. S. Battie do. ..	273	170	62	Privilege leave for 3 months from 10th August to 9th November 1889.
	M.R.Ry. A. Eggia Sastri, Forest Ranger.	4	..	..	
	Mr. G. Homfray, Assistant Conservator.	88	59	67	

134082

Abstract A.—Distribution and movements of Officers—*cont.*

Districts.	Names of officers in charge.	Number of days in charge.	Number of days in camp.	Percentage of days in camp.	Reasons for absence of permanent officer.
Kistna	Mr. G. Homfray, Assistant Conservator.	23	..	..	Privilege leave for 3 months from 24th April to 23rd July 1889.
	,, W. H. Michael, Assistant Collector.	8	..	..	
	,, T. N. Hearsey, Sub-Assistant Conservator.	15	..	..	
	M.R.Ry. V. Alwar Chetty, Sub-Assistant Conservator.	319	275	86	
Nellore	Mr. J. H. B. Brougham, Deputy Conservator.	365	134	37	
Cuddapah ..	,, F. A. Lodge, Assistant Conservator.	365	303	83	
Kurnool	,, P. M. Lushington, Assistant Conservator.	172	65	38	Examination leave for 2 months from 26th May to 25th July 1889.
	,, H. H. Ward, Sub-Assistant Conservator.	53	12	23	
	,, T. N. Hearsey, Sub-Assistant Conservator.	9	1	11	
	,, G. Homfray, Assistant Conservator.	131	57	44	
Bellary	,, W. Carroll, Sub-Assistant Conservator.	247	142	58	
	,, P. M. Lushington, Assistant Conservator.	118	72	61	
Anantapur ..	M.R.Ry. T. Somasundra Mudali, Sub-Assistant Conservator.	85	6	7	Since retired.
	Mr. W. R. McCay, Forest Ranger ..	55	33	60	
	M.R.Ry. T. M. Nallasawmy Naidu, Sub-Assistant Conservator.	225	118	52	
Nílgiris	Do. do. ..	131	61	47	
	Mr. T. Sheffield, Deputy Conservator.	234	131	56	

The time spent in camp on the whole was sufficient. In one or two cases settlement cases again interfered with out-door work, particularly in Nellore.

CHAPTER II.

Areas and Boundaries.

4. *Form* 59-*A* gives the areas of reserved forests under the Forest Act including those that have become reserved forests from the 1st April 1890.

5. *Form* 59-*B* gives the area of forests reserved under previous orders. It is given this year because some errors had been found in the Cuddapah returns. The disappearance noted by the Board of the names of some blocks formerly found in form 59-B is due to several blocks being merged together in some cases when transferring the blocks to 59-A or 59-C.

6. *Form* 59-*C* gives the areas of reserved lands. Some errors in the estimated areas of some of these lands have been noted; but it is considered advisable to make the alterations only when they are constituted reserved forests.

7. *Form* 59-*D* gives the areas of leased forests. The orders of Government in Board's Proceedings, Forest No. 428, of 17th July, were received after the forms were in type; so it is hoped that the form may be accepted this year. Both the leased forests of Sandúr and Mudumalai are reserved lands.

8. *Form* 59-*E* gives the areas of forests notified under Collector's orders.

9. The following abstract gives the changes during the year in the various classes of State forests :—

ABSTRACT B.—Classes of forest.

Class of forest.	Area on 31st March 1889.	Added during year.	Excluded during year.	Difference.	Area on 31st March 1890.	Source or cause of increase or decrease.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	
A. Reserved forests under Act V.	631	195	..	+ 195	826	195 square miles were transferred from C.
B. Under previous orders ..	..	12½	..	+ 12½	12½	Omission in the last year's return ; for explanation see above.
C. Reserved lands	6,424	(*a*) 551½	(*b*) 304½	+ 247	6,671	(*a*) Of this, 397 square miles have been added during the year and 154½ square miles represent correction of area. (*b*) Of this, 195 square miles were transferred to A and 109½ square miles excluded at settlement and also by rectification of area.
D. Leased forests	135½	..	..	..	135½	
E. Other do.	23	..	..	..	23	
Total ..	7,213½	759	304½	+ 454½	7,668	

Of the areas added to reserved forests—

92½	square miles were added		in Godávari.
50	do.	do.	in Kistna.
48½	do.	do.	in Nellore.
1	do.	do.	in Cuddapah.
3	do.	do.	in Bellary.
195			

Of the areas added to reserved lands—

10½	square miles were added		in Vizagapatam.
354	do.	do.	in Godávari.
26	do.	do.	in Kistna.
5	do.	do.	in Bellary.
1½	do.	do.	in Anantapur.
397			

These 397 square miles were notified under section 4, while 154½ square miles have been added owing to errors in the areas recorded in the previous year's report.

10. The following is the list of areas notified under section 4 during the year, in continuation of those in previous year's report :—

List of lands proposed and notified under section 4.

85. Godávari ...	...Ungutur	Notification No. 145 of 21st May 1889.
86. Bellary ...	Kurugodu	Notification No. 163 of 10th June 1889.
	Tekkalakota	
	Suguru	
	Nadivi	
	Halekota	
87. Anantapur ...	Guntakal	Notification No. 252 of 13th August 1889.

88. Godávari ...	anadapalli		Notification No. 281 of 1st October 1889.
	ododdi		
	atangi		
	...minbada		
	Anantagiri		
	Laburti		
	Doramamidi		
	Virabhadram		
	Jeddangi		
	Annavaram		
	Peddagurangi		
	Lingamparti		
89. Godávari ...	Lakkonda		Notification No 282 of 1st October 1889.
	Molleru		
	Sudikonda		
	Mallavaram		
	Tirumalipalem		
90. Do. ...	Jilugumilli		Notification No. 285 of 1st October 1889.
	Darbhagudem		
	Barrinkalapadu		
	Thaduvai		
	Marlagudem		
	Beddadavole		
	Rajahmundram		
	Nallacherla		
	Koppili		
	Kovada		
91. Do. ...	Kandikuppa		Notification No. 288 of 11th October 1889.
92. Vizagapatam ...	Arlova		Notification No. 316 of 22nd October 1889.
	Pedimkonda		
	Kakurlakonda		
	Yenkatapuram		
	Kodavaipudi		
93. Kistna ...	Extension of Venkatayapalem ...		Notification No. 317 of 29th October 1889.
	Extension of No. 16, Bollapalle ...		
94. Do. ...	Koakalúr		Notification No. 32 of 11th January 1890.

11. The following abstract shews the comparison of forest areas with other areas in the district, the figures for the latter being taken from Board's Proceedings (Revenue Settlement) No. 536, dated 26th November 1889 :—

ABSTRACT C.—District areas and Forest reserves in square miles.

Districts.	Total area excluding feudatory and tributary states.	Area excluding zemindaris and whole inam villages.	Cultivated area.	Remainders.			Area of reserved forests, reserved lands and leased forests, &c., 59 A to E.	Percentage of column 8 to column 3.	Percentage of column 8 to column 7.
				Uncultivated and forest.	Area for which returns are not available.	Total of columns 5 and 6.			
1	2	3	4	5	6	7	8	9	10
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.		
Ganjam	8,369	2,257	575	380	1,302	1,682	545	24·1	32·4
Vizagapatam ..	16,992	1,865	190	112	1,563	1,675	47½	2·5	2·8
Godávari	7,858	3,818	1,465	1,581	772	2,353	1,020½	26·7	43·3
Kistna	8,397	5,481	2,996	2,350	135	2,485	685	12·4	27·5
Nellore	8,765	4,045	1,509	2,413	123	2,536	598	14·7	23·5
Cuddapah	8,729	7,492	1,939	5,553	..	5,553	2,031½	27·1	36·5
Kurnool	7,769	6,180	1,799	4,126	255	4,381	1,715½	27·7	39·1
Bellary	5,605	4,320	2,257	1,902	161	2,063	380½	8·8	18·4
Anantapur ..	5,274	4,309	1,637	2,235	437	2,672	276	6·4	10·3
Nilgiris	957	957	293	664	..	664	368½	38·5	55·4
Total ..	78,715	40,724	14,660	21,316	4,748	26,064	7,668	18·8	29·4

The percentage which the area of reserved forests and lands and leased forests bears to the total area of Government land, excluding zemindaris and whole inam villages, is given in column 9; and the percentage which the area of reserved forests, &c., bears to the whole of the uncultivated land is given in column 10.

In the former comparison the highest percentages (in order) are Nílgiris, Kurnool, Cuddapah, Godávari, and Ganjam; in the latter comparison the highest percentages (in order) are Nílgiris, Godávari, Kurnool, Cuddapah and Ganjam.

It must be remembered, however, that a very small portion of these areas has yet been constituted reserved forest, and these percentages are liable to much variation, since portions of reserved lands are liable to be eventually unreserved.

12. *Reserved Forests.*—The following statement gives the reserved forests constituted year after year since 1884-85. The *minus* entries are in consequence of corrections of areas in former statements.

ABSTRACT D.—Reserved Forests in square miles.

Districts.	During 1884-85.	During 1885-86.	During 1886-87.	During 1887-88.	During 1888-89.	During 1889-90.	Total.
Ganjam	..	..	..	8½	9½	..	18
Vizagapatam	..	..	..	..	14	..	14
Godávari	..	..	..	..	11	92½	103½
Kistna	..	..	..	13	6	50	69
Nellore	..	..	½	37½	3—35	48½	54½
Cuddapah	4	— 1½	269½	78	..	1	351
Kurnool	..	..	..	..	..	..	..
Bellary	..	..	..	..	..	3	3
Anantapur	..	5½	8	..	..	..	13½
Nílgiris	3½	90½	94	14	— 2½	..	199½
Total ..	7½	94½	372	151	6	195	826

13. *Village forests.*—In most districts this matter is left over pending the conclusion of settlement. In the Nílgiris final orders are awaited on this question, and meanwhile free permits are issued over certain areas as in the previous year.

In Nellore the whole question whether the area of Kancha grazing grounds and Shekhada free-grazing areas are to be maintained at their customary extent, even at the cost of Forest reserves, is under reference to the Board and Government.

14. *Fuel and Fodder Reserves along the Railway lines.*—This subject was treated of in a separate report published with G.O., dated the 25th March 1889, No. 228, Revenue.

The Cuddapah district report gives the further information that 13 blocks, aggregating 5,562 acres, have been taken up along the new Villupuram-Guntakal Railway line.

15. The following is a rough estimate of the additional areas which may be proposed for reservation in the various districts:—

	Areas in square miles.
Ganjam	116
Vizagapatam	220
Godávari	...
Kistna	21
Nellore	73
Cuddapah	395
Kurnool	300
Bellary	156
Anantapur	40
Nílgiris	10

SETTLEMENT.

16. The following shews the progress of settlement, giving the numbers of blocks and the areas in square miles :—

ABSTRACT E.—Progress of Settlement.

Districts.	Number and area of reserves notified under sections 4 and 16 up to 31st March 1889.		Added in 1889-90.		Total.		Finally notified up to 31st March 1889.	
1	2		3		4		5	
		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Ganjam	35	529	..	..	35	529	3	18
Vizagapatam	1	14	5	10½	6	24½	1	14
Godávari	47	666½	29	354	76	1,020½	2	11
Kistna	54	659	1	26	55	685	10	19
Nellore	120	579	..	..	120	579	7	6
Cuddapah	108	1,829	* 1	* 9	109	1,838	19	350
Kurnool	14	1,715½	..	..	14	1,715½	..	..
Bellary	50	313	5	5	55	318	..	..
Anantapur	43	274½	1	1½	44	276	5	13½
Nílgiris	108	295½	..	..	108	295½	51	199½
Total ..	580	6,875	42	406	622	7,281	98	631

Districts.	Finally notified during 1889-90.		Total finally notified.		Balance.					
					Settled and report received in Circle office up to 31st March 1890.		Settled, but report not received in Circle office.		Settlement proceeding.	
	6		7		8		9		10	
		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Ganjam	..	..	3	18	16	271	3	16	13	224
Vizagapatam	..	..	½	14	..	..	..	..	5	10½
Godávari	4	92½	6	103½	29	241	2	20	39	656
Kistna	13	50	23	69	24	271½	1	78	7	266½
Nellore	30	48½	37	54½	38	146½	13	32½	32	345½
Cuddapah	..	1	19	351	55	1,027	..	..	35	460
Kurnool	..	..	..	..	10	1,680	..	..	4	35½
Bellary	2	3	2	3	23	82	1	5	29	228
Anantapur	..	..	5	13½	15	91½	2	28½	22	142½
Nílgiris	..	..	51	199½	54	30½	2	1½	1	64
Total ..	49	195	147	826	264	3,841	24	181½	187	2,432½

NOTE.—The number and area of blocks as given in form 59-C have been adopted. The difference in the number of blocks is due to the clubbing of two or more blocks in some cases before or after settlement.

* Wrongly shown as abandoned in 1887-88.

Out of a total area of 7,281 square miles under settlement operations, only 826 square miles have been finally notified under section 16 of the Forest Act, but the settlement of an area of 4,022½ square miles has been completed (though part of it has to be revised), leaving the area of 2,432½ still under various stages of settlement.

The revision, however, above mentioned has proved to be in many cases a very protracted work, more especially in Cuddapah, where the difficulties are unusually great.

17. The following abstract shews the reserved lands included in form 59 (*c*) which are not at present under settlement. These are fodder and fuel reserves, or reserved lands set apart under the Board's or Collector's orders :—

ABSTRACT F.—Reserved Lands not under settlement (included in Form 59-C) in square miles.

Districts.	Reserved Lands as per form 59-C.	Proposed Reserved Forests under settlement.	Balance remaining as pure Reserved Lands on 31st March 1890.
Ganjam	527	511	16
Vizagapatam	10½	10½	..
Godávari	917	917	..
Kistna	616	616	..
Nellore	543½	524½	19
Cuddapah	1,668	1,487	181
Kurnool	1,715½	1,715½	..
Bellary	315	315	..
Anantapur	262½	262½	..
Nílgiris	96	96	..
Total ..	6,671	6,455	216

Notes District by District.

18. In *Ganjam* progress has been unsatisfactory. Most of the final notifications for Goomsur had to be sent back by the Board for revision. Hence there was no alteration under 59-A. The settlement of the Berhampore reserves is said to be virtually finished.

Vizagapatam.—Nil.

In *Godávari* the District Forest-officer complains that the services of the Forest Settlement-officer were available only for 6 months of the year. At the close of the year matters stood thus in that district—

92½ square miles finally notified under section 16;
241 do. final reports submitted, but not notified. Of this area some 120 square miles were notified under section 16 too late for this year's return;
20 do. settlement complete but final report not submitted;
656 do. under settlement;

but it is gathered from the District report that a further area of some 100 square miles is virtually settled, though this office has no certain knowledge of the fact.

In *Kistna* the progress was fairly good. During the year 13 blocks were finally notified under section 16. Out of the remaining 32 reserved lands, 27 are fully settled but for the acquisition of some fields in two blocks.

Nellore.—Good progress was made in this district: 30 blocks = 48½ square miles were finally constituted reserved forests, and the remaining tracts, which have been notified under section 4, have been virtually settled, except for a few complications from claims by shrotriemdars and zemindars.

No new tracts were notified, but selections were made in Kanigiri and Atmakúr taluks.

Cuddapah.—Work has been very slow during the year; but the Forest Settlement-officer spent only about 40 days in the district during the year, and work by correspondence is slow. The charges of Forest Settlement-officers have now been subdivided, and it is hoped that work will be quicker. Only one block was finally notified under section 16. The final settlement of several other blocks was delayed because the papers had to be returned for revision; but the settlement work is otherwise complete for an area of over 1,000 square miles.

The final notification of the Vandadi block was submitted before the close of the year, and the settlement of the Madhavaram block was completed, except the acquisition of certain lands.

Kurnool.—Progress in Kurnool was not satisfactory during the year; but the settlement work of a very large area (1,680 square miles) is nearly complete. The cause of delay is a revision of boundary statements, &c., as much more accuracy of description is now insisted on than formerly.

Bellary.—Progress was not very good in Bellary, as much work of revision was necessary. The District Forest-officer complains of want of maps in the unsurveyed taluks. This seems an error, for the survey of the whole of Bellary has been completed with the exception of one taluk which is nearly completed. Maps are not however published of all the districts; but probably had the facts been ascertained, the Survey Department would have set to work first at the maps required for the purposes of Forest Settlement.

Anantapur.—Work was very slow, only one block being notified under section 4, and only two reserves were settled, one by the Head Assistant Collector, Penukonda, and the other by the Deputy Collector, Gooty. The final report is, however, due from the latter, and reports are said to be due for 3 blocks settled in 1888-89.

Nilgiris.—The papers relating to an area of nearly 30½ square miles in the Paranginád amsham, which was finally settled, have been returned for revision of boundary description. The settlement of the remaining lands is in progress.

19. *Cost of Settlement.*—The following shews the cost incurred for special Settlement-officers :—

(1) Mr. D. Jagannadha Row (Godávari, Kistna and Kurnool) appointed on 20th October 1886.

Year.	Cost.
	Rs.
1886-87	7,409
1887-88	9,727
1888-89	9,818
1889-90	10,759
Total ...	37,713

(2) Mr. I. Sarabhalingam Naidu (Bellary, Anantapur and Nellore) appointed 14th December 1886.

Year.	Cost.
	Rs.
1886-87	1,622
1887-88	10,760
1888-89	10,109
1889-90	10,301
Total ...	32,792

(3) Mr. McMurray (Cuddapah), date of appointment 10th February 1890.

Demarcation.

20. The following abstract shews the area demarcated according to the latest returns. The total area is 1,380½ square miles, of which 930¾ square miles are demarcated finally and the balance in a preliminary manner :—

Name of districts.	Area demarcated during year 1889-90.		
	Area in square miles.		
	Preliminary.	Final.	Total.
Ganjam	61	144½	205½
Vizagapatam	6½	..	6½
Godávari	93½	79	172½
Kistna	57½	271	328½
Nellore	..	216	216
Cuddapah	130	46½	176½
Kurnool	29¼	..	29¼
Bellary	67½	49½	117
Anantapur	..	120¼	120¼
Nilgiris	4½	4	8½
Total ..	449¾	930¾	1,380½

Notes District by District.

21. *Ganjam.*—The work during the year consisted in—

Range.	Old lines cleared.		New cut.	Cost.
	Miles.	Cost.		
		Rs.		Rs.
East Goomsur	76	196	52	324
West do.	71	456	32	188
Buguda	20	102	5	23
Surada	..	69	1	13

The high cost of clearing old lines in West Goomsur is due to digging out stumps.

Godávari.—During the year the work is more clearly classified than the above and consisted in—

Distance in miles.	Nature.	Cost.	Cost per mile.
NO.		RS.	RS. A. P.
73	Preliminary	580	8 0 0
58	Final	801	14 0 0
3	Fencing (trench and mound with palmyra and screw-pine hedge)	290	97 0 0
570	Boundary posts and pillars	510	0 14 0 each.
209	Reclearing old lines ..	760	3 10 0
	Total ..	2,941	

In calculating the cost of demarcation per mile, the cost of fencing and ditching must be kept separate. The cost of final demarcation with the cost of boundary pillars and posts is about Rs. 20 a mile, and considering the thoroughness of Mr. Battie's work, the cost is by no means excessive.

Kistna.—Eighty-one and a-half miles were demarcated with a line 10 feet broad, and loose stones were removed at a cost of Rs. 11-8-0 a mile. One thousand and four hundred boundary marks consisting of cairns 5 feet high cost about $7\frac{1}{2}$ annas each. The average cost for 43 reserves completely demarcated is Rs. 20-4-0 per running mile.

Nellore.—Detailed information is entirely omitted from the report.

Cuddapah.—One hundred and seventeen and a-half miles of boundary were cleared at a cost of Rs. 17 a running mile. The Chitvél boundary work was done on contract and done badly, and the charges are under investigation.

Kurnool.—Very little was done during the year because final notifications were awaited.

Bellary.—Very little work was done, and the cause was said to be press of other work. It is to be regretted that only half the allotment was spent on this work.

Anantapur.—Good work was done. Two hundred and thirty-five and a-half miles were demarcated at a cost of Rs. 1,504-12-0; and 2,152 pillars were erected at a cost of Rs. 680. The average cost was Rs. 9-4-0 per mile, but the work of clearing is easy in Anantapur, and stone is plentiful.

A further expenditure of Rs. 680 odd was made on survey marks.

Up to date 28 blocks with an area of 185 square miles have been taken in hand for demarcation, and 407 miles out of 551 have been completed.

Besides this, $29\frac{1}{2}$ miles have been fenced or planted at a cost of Rs. 92-8-0 a mile.

Nílgiris.—One hundred and twenty-four miles were demarcated at Rs. 15-8-0 per mile and a large number of posts, some 2,369 in all, were renewed at a cost of 1 anna 8 pies each: 164 miles were recleared at a cost of Rs. 7 a mile.

CHAPTER III.

SURVEYS AND WORKING PLANS.

22. *Surveys.*—The only work of any importance was carried out by the Revenue Survey Department in Bellary and Anantapur. The following are notes on the work in each district:—

Ganjam.—Departmental surveys were made of some compartments, but the Conservator stopped these and ordered that plans should be made out for whole blocks. This work is in hand, and the survey of Dimrijoli block is nearly completed. The cost of these petty surveys was under Rs. 550.

Godávari.—Boundary surveys were made departmentally of Upputer 10,000 acres, Narsápur 59 acres, and Bendemurlanka 310 acres.

Kistna.—The survey of Kondur block was made at a cost of Rs. 120, and a map made at 4 inches to the mile.

Nellore.—Two plantations were surveyed by a special officer of the Survey Department.

Cuddapah.—None.

Kurnool.—None.

Bellary.—There were departmental surveys by Range officers of 5 reserves in Hospet taluk, of 2 in Hadagalli, of 2 in Kúdligi, of 3 in Ráyadrug. These surveys were mainly for maps for settlement purposes. There was also a temporary survey party consisting of 2 deputy surveyors, 1 draughtsman and 4 peons said to be attached to the District Forest office but working under the Deputy Superintendent of Survey.

The work turned out by this party seems to have been *nil*; and the facts are under investigation.

Besides these there was regular work conducted by the Revenue Survey Department after July, chiefly in the Adóni and Alúr taluks. Maps of the following reserves were completed :—

Katalam.	Kurimetla.
Halwi.	Bunivasi.
Halekota.	Ráyachóti.
Nandavaram.	

And the following maps will soon be ready :—

Adóni East and West.	Yeruru (3 blocks).
Ganekolu.	Chippigiri (3 blocks).
Kotekallu.	Badenahalu.
Gummanur (3 blocks).	Kudbur.
Timmapuram.	Degalahalu.

The cost is not yet known exactly, but was not to exceed Rs. 70 per square mile.

Anantapur.—There was some small boundary works for survey purposes. Survey by the Madras Survey Department began in August, and work is in progress in 18 reserves, including a resurvey of the boundary of Muchukota.

Nílgiris.—Nil.

23. *Working Plans and Plans of Operations.*—

In *Ganjam* an attempt was made by the District Forest-officer to work a compartment in each reserve ; but this was stopped by the Conservator and orders issued to concentrate the work.

In *Godávari* no regular working plans were made out, but annual plans of operations were made out for th ereserves of Upputer, Narsápur, Bendemurlanka and Coringa.

In *Kistna* annual plans of operations were made out for all the reserved forests as they stood in 1888-89 ; but these plans require revision.

Nellore.—The only reserves under working plans are (*a*) the casuarina plantations and (*b*) the Śríharikóta Reserved Forest.

(*a*) The old working plan for these plantations arranged for the clean felling of annual coupes. This was modified by the Conservator, and a certain number of trees only, viz., 75 to the acre, were felled over an extended area. Suppressed and badly-grown trees are got rid of, and increased advantages given to the remainder. It is hoped also that the felled stumps will throw out coppice shoots, for it is noted that coppice of casuarina succeeds best where there is some protection afforded by trees around.

This scheme was tried during the year in—

Dugarázpatam.

Years.		ACS.
1880	Planting 1st part	35
1880	„ 2nd „	24
1881	„ 1st „	7
1881	„ 2nd „	34

Tamminapatam.

1880	Planting 1st part	40
1880	„ 2nd „	24

Varani.

No. 1	Plantation	40
„ 2	„	40
„ 3	„	40

Vutukur.

No. 1	Plantation	32
„ 2	„	60

The result of the working of the Nellore Plantations is given as appendix (B). The total expenditure up to the end of the year is Rs. 1,81,427, and the total receipts are Rs. 89,958. The receipts during the year were Rs. 7,532 ; but the market rates were very low, falling to 4 rupees a ton.

Śrîharikóta.—The working plan is as before ; the forest is divided into khandams which are pollarded on a rotation of 12 years.

Cuddapah.—Annual plans of operations were made out for Kodur Red Sanders Plantation, for Uparapalle, Reddipalle, Pullampet, Mittamidapalle and Kamalápuram Plantations, and for Thanakonda Reserve.

Kurnool.—Nil.

Bellary.—The rough working plan made out formerly by the Conservator was not adhered to ; and "Improvement thinnings" were too costly and were badly done. The Collector's remarks tend to shew that this result was due to Mr. Carroll having left the work to an incompetent Ranger, but the blame is tempered by a remark on the inadequacy of the establishment.

Annual plan of operations was made out for the Sandúr forest.

Anantapur.—A plan of operations was made out for Khójjapalle Reserve. Under this plan 2 blocks were felled.

In one block 100 babul trees (of 48 inches girth and over) yielded 7,706 cubic feet of timber and branchwood.

Nilgiris.—The working plans were generally adhered to which were made out for Cairn Hill, Aramby, Governor's Shola, Coonoor Peak, Bleak House, Bandy Shola, Black Bridge, Ghât Reserve and Barliyár (see Inspection note, dated 6th April 1887). The result of felling is given in appendix (C) to this report. The natural sholas were, however, not worked as proposed as the orders of Government restricted felling in them.

A working plan was made out by the Conservator for the wattle plantations of Snowdon, Brooklands, Marliamund and Sheffield.

Plans of operations for Rallia and Benne were made and carried out during the year.

CHAPTER IV.

PROTECTION AND IMPROVEMENT.

(a) ESTABLISHMENT, AND RANGES AND BEATS.

24. *Establishment.*—The following abstract shews the sanctioned establishment of the year compared with that of last year :—

	For the year 1888-89.	For the year 1889-90.	Difference.	Remarks.
Permanent.				
Conservators	1	1	..	The name of Mr. Higgens, C.S., was kept on the list of the Forest Department during his furlough till August 1889, when he returned to the country and went back to Revenue duty.
Deputy Conservators	4	4	..	
Assistant Conservators	7	7	..	
Sub-Assistant Conservators	4	6	+ 2	
Rangers	21	24	+ 3	
Foresters	49	49	..	
Forest Guards	343	348	+ 5	
Clerks	35	35	..	
Peons	96	96	..	
Total	560	570	+ 10	
Temporary.				
Surveyors	7	8	+ 1	
Draughtsmen	3	7	+ 4	
Foresters	5	5	..	
Overseers	1	1	..	
Depôt Gumastahs	34	27	— 7	
Watchers	65	82	+ 17	
Tannah peons	248	268	+ 20	
Lascars	18	16	— 2	
Maistries	39	5	— 34	
Gardeners	105	105	..	
Mahouts and Kavadies	6	14	+ 8	
Boat syrang	1	3	+ 2	
Clerks	16	19	+ 3	
Peons	39	38	— 1	
Total	587	598	+ 11	

The difference was very small, for the proposals regarding a large change in the strength of the establishment were not accepted by Government during the year.

The superior staff consisted of—

Name.	Rank.	Date of appointment to service.
J. S. Gamble	Conservator	1872
F. D'A. Vincent	Deputy Conservator, II Grade	1874
A. W. Lushington	Do. IV ,, ...	1882
J. H. B. Brougham	Do. IV ,, ...	1864
T. Sheffield	Do. IV ,, ...	1860
G. Homfray	Assistant Conservator, I ,, ...	1882
J. S. Battie	Do. I ,, ...	1879
F. A. Lodge	Do. I ,, ...	1883
H. T. D. Sweet	Do. II ,, ...	1884
P. M. Lushington	Do. II ,, ...	1886
C. D'A. McArthy	Do. III ,, ...	1888
A. B. Jackson	Do. III ,, ...	1889
Sub-Assistant Conservators.		
T. M. Nallasawmi Naidu ..	Sub-Assistant Conservator, I Grade ..	1876
V. Alwar Chetty	Do. do. I ,, ..	1886
H. Stafford	Do. do. II ,, ..	1870
T. N. Hearsey	Do. do. II ,, ..	1887
H. H. Ward	Do. do. II ,, ..	1881
T. G. A. Gaudoin	Do. do. II ,, ..	1872

Of this staff, Mr. Vincent has been on leave without pay for over three years; and it is questionable if Mr. Sweet will recover his health sufficiently to return to the service.

Of the rest of the staff, Mr. Sheffield's services are lent from the Southern Circle; and he will shortly retire. Neither Mr. Sheffield nor Mr. Brougham can rise in the service beyond a stipulated grade.

Mr. Battie was appointed in this country. The rest of the superior staff from Mr. Lushington downwards are trained men; but are all under eight years' service.

Mr. Homfray's health is seriously impaired, and short leave was granted during the year to two or three officers to avoid the probable necessity for longer leave, if the strain could not be relaxed.

Nothing more need be added to the remarks made in last year's report to shew that the department is undermanned.

Ranges and Beats.—These for the most part are the same as last year, as no material increase has been made to the establishment. The number of Ranges was sixty-two, foresters in many cases having to hold charge of Ranges.

(b) General Protection and Breaches of Forest Law.

25. The following abstract shews the record of facts connected with Forest offences during the year:—

Abstract G.—Forest offences (see Form No. 63).

Year.	Brought forward from previous year.	Cases added.	Cases disposed of.							Balance.	—
			Cases.	Persons.	Percentage of cases withdrawn.	Percentage of cases compounded.	Amount realized.	Percentage of cases convicted.	Percentage of cases acquitted.		
	cases.						rs.				
1888-89	125	1,733	1,577	3,855	*Nil.*	27	1,818	53	20	{ 179 102 }	Cases compounded.
1889-90	281	1,355	1,478	3,563	*Nil.*	35	2,744	46	19	158	

The number of cases was considerably less than last year, but there was an increase in the number of cases compounded. The percentage of convictions was lower than last year.

Ganjam.—The District Forest-officer gives as his reason for the increase in number of cases compounded that this method of settling the matter is easier for both parties; and the Sub-Magistrate of Goomsur showed a direct tendency towards antagonism against the Forest Department and it was for some time almost impossible to get a conviction before him.

Godávari.—Slight increase in number of prosecutions.

Cuddapah.—The question is, however, best summed up in the following quotation from the District Forest-officer's report:—

"Systematic theft of timber still obtains in the Palkondas and Nallamalais; the timber is removed by night; and, once outside the forest, shrotriem and zemindari permits are produced to cover it. Guards' beats are so large that timber stealers can generally find out when the guards are not in the portion of the forests in which they intend cutting. Moreover, the honesty of the guards is not above reproach; in some places they are systematically bribed by the systematic timber thieves, and although frequent change of guards is resorted to, the timber trade pays so well that every new guard is bought over.

"The Ráyachóti Ranger was benighted in the Palkondas one night, at about 11 P.M.; he came across a large gang of men (he estimates them at 100) carrying red sanders timber towards Cuddapah. As soon as he was seen the wood was passed and they all bolted. A short time afterwards over a hundred red sanders poles and posts were found hidden at the foot of the Palkondas near Cuddapah. On information received the Badvél Forester had a track leading into the Nallamalais watched one night. Five cart-loads of teak were seized and taken to Nayanipalle, where the village magistrate refused to give a receipt for the timber handed over to him, saying that having heard that unclaimed teak timber was lying in the reserve, he had sent carts to bring it out. The above cases are samples; many of the village officers in villages adjoining the forests are the leaders of the trade in stolen timber, and until a considerable addition is made to the subordinate staff, the rifling of the forests will continue. If it is unsafe to leave rupees unwatched, it is equally unsafe to leave valuable forests insufficiently protected."

The District Forest-officer's conclusion that an increase in the subordinate staff is what is wanted hardly follows from his description of the untrustworthiness of Forest guards. The wants are a stronger upper staff as well, efficient transit rules, and an amendment of the Madras Forest Act on the lines of amendment proposed and carried out by the Honorable P. P. Hutchins (Act V of 1890) for the India and Burma Forest Acts.

(c) Forest Fires and Fire-protection.

26. Form No. 62 gives the details of fire-protection. The following abstract gives a comparative statement of the results in two years with the total cost on fire-protection up to date:—

Abstract H.—Fire-protection (see Form No. 62) in square miles.

Total cost up to 31st March 1889.	1888-89.				1889-90.				Total cost during year 1889-90.	Total cost up to 31st March 1890.
	Area attempted.	Area burnt.	Percentage protected.	Average cost per square mile protected.	Area attempted.	Area burnt.	Percentage protected.	Average cost per square mile protected.		
Rs.	Sq. mls.	Sq. mls.		Rs.	Sq. mls.	Sq. mls.		Rs.	Rs.	Rs.
71,917	1,667	229	86	10	2,700	200	92·5	6½	16,560	88,477

In making this abstract the first column in form No. 62 has not been taken into account, for it seems to the Acting Conservator that this column is slightly misleading.

The figures entered in this column of form No. 62 show the area actually protected during the year previous to that under report, whereas the second column of form No. 62 shows the total expenditure on all previous years up to the end of the year previous to that under report. If the areas attempted for protection were always the same, it might be correct to give the information entered in the first column, but not only are these areas increased in some districts by the addition of fresh areas, but they are occasionally diminished in some districts, and the areas under protection are altered in others.

It may be advisable to keep a record of the total expenditure up to date, but setting this expenditure against the area protected during the previous year seems erroneous.

A comparison of the figures for two years shows that over 1,000 square miles more were attempted for protection this year, that a higher percentage was protected at a lower average cost per square mile. These figures tend to show that increased attention during the year was given to this important matter of conservancy.

It is very difficult to generalise on the figures submitted from different districts, for the conditions are very variable. In some places one or two watchers are sufficient to protect a reserve; in others the most elaborate and costly fire-lines fail.

Notes District by District.

Ganjam.—The percentage of failure was $5\frac{1}{2}$, and the cost under Rs. 2 per square mile.

Godávari.—An additional area of 55 square miles was placed under special fire-protection, beyond the area under protection last year. Only 460 acres were burnt; five blocks not liable to be burnt, such as mangrove forests, are omitted from the list this year.

Kistna.—The only serious fire was in Kondapalli, where 1,000 acres were burnt. Fires occurred in four other reserves, but were extinguished after only 35 acres were burnt.

Nellore.—The results were good on the whole. Nearly 7,000 acres were burnt on the Rápúr Veligondas by a fire said to have come from Cuddapah. Mr. Brougham submits some maps which are appended to this report on the principle suggested for fire returns. Fire-patrols were employed only on the Veligondas, the plain forests being looked after by the ordinary staff.

Cuddapah.—The area under protection as compared with the former year was very considerably increased, as an attempt was made to include the whole of the Seshachellam Reserve and the Lankamalais and the Nallamalais under protection. A portion only of the Lankamalais was saved, the fire as a rule sweeping through the whole tract every year.

Complaints were received of the want of co-operation of village reddis in preventing the spread of fires.

Kurnool.—The area attempted was increased by the addition of the South Veligonda and Rámallakót forests. The two Nallamalais blocks were not successfully protected.

Bellary.—The serious fire reported in Board's Proceedings, No. 592, Forest, dated 6th December 1889, occurred towards the end of the fire season, April to July 1889. As regards the later fire season, January to March 1890, during which a sum of Rs. 2,350 odd was spent, the operations must be considered very successful, as out of an area of 289 square miles systematically attempted, 96 per cent. escaped.

Anantapur.—The operations were very successful. Out of an area of 90 square miles attempted, only 1 per cent. was burnt.

Nilgiris.—The fires on the uplands were confined chiefly to grass lands and did little damage. There were, however, serious fires in the Moyar and the Sígúr forests. The returns show only a very small area burnt in Mudumalai forest, under 900 acres. If they are to be relied on the immunity from fire is wonderful; for in all these forests where the grass is long and the vegetation luxuriant, there are numerous dangers to contend against, the worst arising from the jungleman inside the forests.

(d) GRAZING.

27. The total receipts under this head compared with the receipts last year were—

ABSTRACT I showing fees for grazing and grass removed by purchasers.

1888-89.	1889-90.	Difference.
RS. 77,459	RS. 79,470	RS. + 2,011

The general results do not show much difference. The returns were slightly higher from Godávari, Nellore, Cuddapah, Bellary and Anantapur, and lower from Kistna, Kurnool and the Nílgiris.

The information called for in G.O., dated 7th May 1890, No. 314, Revenue, communicated in Board's Proceedings, Forest No. 290, of the 21st idem, relative to the grazing in forests of sheep and goats is given in Appendix E.

Notes District by District.

Ganjam.—Returns almost *nil.* It is stated that some additional forests are to be open to grazing during the current year.

Vizagapatam.—Hardly anything.

Godávari—Has received special attention during the year. The returns have not been large, being under Rs. 2,000. The following general principles have been adopted :—

(1) Goats and sheep excluded from all Reserved Forests and Reserved Lands.
(2) Grazing prohibited entirely in certain small reserves in low country.
(3) Grazing regulated and allowed only on payment in all other reserves.
(4) Exception made in favor of jungle tribes, Koyas and Reddis, who are allowed free grazing.

Kistna.—As heretofore grazing dues have formed a large proportion of the Kistna revenue, the sum of Rs. 48,541 being collected under this head; but a step towards limiting grazing was made during the year, and goats were excluded from all reserves, and grazing prohibited in part, or the whole, of 17 blocks.

Nellore.—Grazing kanchas were leased as usual, the returns being Rs. 16,036 as against Rs. 14,769 last year.

Cuddapah.—There is need of correction of the remark made in last year's annual report that "the Reserved Forests and proposed Reserves of which the settlement was complete were closed against grazing, other forests were left open for grazing on payment." This was not the case, for grazing was permitted on payment in Reserved Forests with the exception of a few closed blocks (chiefly fife-protected blocks), and in forests of which the settlement was complete, and was free in other forests; and the same system was in force during the year under report. Fees were issued at full rates for 13,924 head of cattle. A large number of Nellore cattle come into the district, and the question has been raised whether extra fees should not be charged on these alien cattle.

Kurnool.—Grazing fees were collected only in the Nallamalais and Veligondas.

Bellary.—The returns were trifling.

Anantapur.—Only half fees were charged. Grazing was permitted for part of the year in all reserves in the case of cattle; but sheep and goats were excluded. After the 1st July grazing was not permitted in the Reserved Forests of Somarazmalai, Kottakota and Narsampalli, nor in the Reserved Lands of Muchukota or Kalyándrug, North and South.

Nílgiris.—Full rates were charged in Ootacamund and Coonoor settlements and at Naduvatam. One quarter rates were charged in Kótagiri, Kullar and Melúr. The rights of grazing were sold in Moyar, Singara, Bockipuram, Kalhatti and Northernhay Reserves, but fetched a very trifling sum. Grazing was not properly checked in Mudumalai or Sígúr Forests.

(e) Natural Reproduction.

28. This subject is not very clearly treated in many of the district reports.

Ganjam.—The only note was as to the havoc caused by cattle entering into the Kaliamba reserve after felling, and to the marked improvement after they were effectually excluded.

Godávari.—The effect of protection is thus referred to by Mr. Gamble in an inspection note. "I can testify to the excellent improvement in the growth (in Devancheru block) and can only say that the work at Devancheru already shows what can be done with even a very unpromising looking area. The better trees are fast going ahead and the undergrowth is nearly impenetrable." The District Forest-officer goes

further, and says that when first taken in hand this was the poorest piece of scrub in the district, and strict protection has been in force only 2 years.

The best instance of protection against fire and grazing is shown in the fine tract of Beddadavole.

Kistna.—Good results are said to be clearly visible in the Kondavid and Bellamkonda blocks which have been closed against grazing for 2 years.

Nellore.—No special remarks.

Cuddapah.—The growth in the blocks cut over in the Balapalle Working Circle was much impeded by a strong growth of *strobilanthes*, but came on fairly well when this was cleared away.

In the Seshachallam reserve, natural reproduction is very poor in many parts, owing to the fact that forest fires have not been effectually excluded in former years, and a fire does excessive damage when the grass is 6 feet high. Very special care will have to be taken with such reserves when the establishment is strong enough to protect them effectually.

Kurnool.—There was good reproduction in the blocks cut over for the supply of fuel to the Bellary-Kistna Railway, but unfortunately the young growth was much injured by fires.

Bellary.—The effects of protection are seen by a comparison of the protected blocks with those of the Rajah's forests adjoining. It was noted that the young growth in a compartment felled in 1884-85 lost its leaves a month earlier than the growth in a compartment where thinnings only had been made. Satinwood and *Terminalia tomentosa* both coppice well here.

Anantapur.—In Muchukota, where the soil is red and stony, and the main growth is *Hardwickia binata*, seedlings of *Hardwickia* still appear and die down in the hot weather. It is believed, however, that these seedlings do not all die, but that the roots of some perish; and it is believed that a gradual improvement is going on. The old trees are vigorous. In the tract of Kottakota which has been surrounded by a wall of stone, the growth of trees of various kinds and the crop of seedlings are wonderfully good. Protection has been real and effective here. In the Amagondapolliem reserve *Hardwickia* seedlings are coming on fairly.

Nilgiris.—In Mudumalai, which is a tract of high forest in the regular teak belt, the growth of seedlings and shoots in the thinned compartments 3 and 4 of block II is very good.

At Benné, which is a similar tract of forest, the shoots from trimmed stools are growing very rapidly.

In the uplands, the reproduction in sholas where the creepers have been cut and the undergrowth cleared is good, as examples may be named Ghát Reserve, Barliyár, Kattapallam, Longwood, Constantia, Lovedale, Doddabetta.

The growth of coppice in the *Eucalyptus* plantations is very regular and good.

(f) Artificial Reproduction and Cultural Operations.

29. The following is an abstract of the cost and progress of work on plantations, topes, and other cultural operations:—

Abstract J.—Plantations and Topes (see forms 60 & 61).

	Up to 1888-89.		Added during 1888-89.		Added during 1889-90.		Total	
	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.
		Rs.		Rs.		Rs.		Rs.
Plantations	7,092	4,32,224	400 — 347½	14,210 — 24,144	— 382¼ — 7	13,979 — 371	7,519¾	4,35,898
Topes	13,715	1,10,932	— 6,850	2,215 — 1,575	41 — 51	2,125 — 1,936	6,855	1,11,761
Other charges (cultural operations).	977½	6,401	129½ — 333	1,509 + 1,134	397½ ..	2,941 — 20	1,171½	11,965
Total ..	21,784½	5,49,557	529½ — 7,530½	19,068 — 25,719	820¾ — 58	19,045 — 2,327	15,546¼	5,59,624

Most of the figures have been previously explained; but as the form in the appendix does not clearly explain the figures, the following explanation is given.

In the column of "areas added in 1888-89," the *minus* quantity, 347½ acres, is thus composed—

1	plantation of	20 acres	sold.
1	„ of	24	„ exchanged.
2	„ of	44	„ cleared.
1	„ of	23	„ struck off because not a regular plantation, but natural growth
4	„ of	27½	„ transferred to cultural operations.
		209	„ rectification of area.
		347½	

The *minus* quantity of 6,850 acres is thus composed—

Topes in Ganjam ...	1,063 acres	struck off the list, as they were misnamed topes, consisting only of scattered trees in villages.
„ in Cuddapah.	5,764 „	
1 tope	21 „	abandoned.
1 „	2 „	transferred to plantations.
	6,850	

The *minus* quantity 333 is thus composed—

Acres.	
3½	small teak plantation in Ganjam struck off list as a failure.
51	in Vizagapatam being not really plantations, but groups of sál.
260	transferred to plantations in Cuddapah.
4½	struck off in Cuddapah.
14	omitted in Bellary, being natural babul tracts.
333	

In the column of "areas added during 1889-90," the *minus* quantity of 7 acres was in consequence of the clearance of this area. The *minus* quantity of 51 acres was thus composed—

8	topes of	30 acres	in Godávari transferred to Poramboke.
3	„ of	13 „	in Kistna sold.
3	„ of	8 „	in Kistna omitted as non-existent.
51			

Under the head of cost (1889-90) the sum of Rs. 20 was deducted because a plantation at Hampi costing that sum was abandoned.

30. Under this head the following work was done in the various districts.

Ganjam.—A commencement was made in Chatrapur and the Podara block in Berhampore. About 100 acres in each were partly sown, partly planted with Nim, tamarind, and *cassia tora*. Heavy rains and heat destroyed many seedlings, but the District Forest-officer estimates that 30 per cent. of 3 lakhs of seedlings remain.

The cost at Chatrapur was Rs. 179; at Podara Rs. 239.

Large plantings of Arabian dates are in progress. The *Eucalypti* failed.

Godávari.—There are two plantations of casuarina; 9 acres were added to that at Narsápur and 263 acres to that at Bendèmurlanka.

Nine acres were planted in the former at a cost of Rs. 310 and 13 acres in the latter at a cost of Rs. 325.

Two hundred and fifty seedlings of *Eucalyptus* planted out in the latter are doing well.

Kistna.—Ten acres of casuarina were planted in Gopukandipalem, and 8 acres of casuarina, maddi and neredu in Kanukollu.

Vacancies were planted up by gardeners without any additional cost.

Nellore.—A new experiment was tried, viz., to transform parts of the casuarina plantations into a forest of indigenous trees. Sowings have been made in certain compartments after removing a certain number of casuarinas and leaving others to shelter the seedlings. This was tried during the year over an area of 70 acres in

the Dugarázpatam, Tammenapatam and Kottapatam plantations. It failed in the two former, but the seedlings are 6 inches high in the latter.

This experiment will be watched with care, because the same land will not go on producing casuarina crops indefinitely, and attempts are being made to find out some less expensive way of restocking felled areas than the expensive method of regular planting.

Casuarina planting.—Seventy acres were planted up at Dugarázpatam, and 30 acres at Kottapatam, but almost the whole of the seedlings at the former were destroyed by the cyclone of December; out of 35,000 only some 4,000 remain.

Śríharikóta.—Blanks in the forest over a space of 150 acres were sown with seeds of indigenous trees, but the seedlings as last year died down during the hot weather.

Cuddapah.—The average girth in the sample area of the Red sanders plantation, which is given annually, was 21·39 inches.

Seedlings planted in Balapalle to fill gaps are doing well.

Tangedu (*cassia auriculata*) sown in furrows in blank spaces in certain plantations dies down during the hot weather, but reappears next year. That sown 4 years ago is now ready to cut.

Kurnool.—Nil.

Bellary.—Nil.

Anantapur.—Five pounds of Nim seed sown in block II of Khojjapalle, and 2,500 palmyra seeds in block I with success.

Nílgiris.—The season was a good one, and the planting succeeded. In Aramby and Cairn Hill the new planting was with *Frenela*, *Cryptomeria*, *Cypress*, *Casuarina suberosa*. In the Rallia reserve 23 acres were planted with *Frenela* and *Pinus longifolia*, and in the Kullar reserve 100 acres were planted up with Mahogany, *Swietenia macrophylla*, *Vengai* and *Teak*.

The mahogany of both species planted in block IV were cleared of creepers and other interference, and have a healthy appearance, ranging from 3 feet to 14 feet in height. The compartments 1, 2 and 3 of block II which have been planted with *Teak*, *Vengai* and *Berrya ammonilla* were also cleared, and the growth looks healthy.

The nurseries at Lovedale, Sim's Park and Kullar have been carefully tended during the year and are full of plants. That at Tippacadu is also maintained. That at Cairn Hill was abandoned. The principal plants grown at Lovedale were *Cupressus macrocarpa*, *Frenela* and *Casuarina suberosa*, besides several of the better classes of indigenous trees.

Seeds of *Eucalyptus*, *amygdalina*, *gunnii*, *botryoides*, *leucoxylon* and *ganiocaly* were sown and germinated well. A further reference is given under "Experiment" in appendix A.

(*g*) Works of Improvement.

31. Among such works may be mentioned—

Kistna.—Creeper cutting over 250 acres in Kondavid and experiment in cutting back badly-grown *Hardwickia*, *Chloroxylon*, and *Anogeissus*.

Nílgiris.—A great amount of pure improvement work was done in this district; creepers were cut and undergrowth cleared over an extent of 290 acres in twelve separate reserves at a cost of Rs. 1,417.

The returns from the sale, by head-loads chiefly, of the result of these clearings was Rs. 742. The result of the operations is undoubtedly most favorable to reproduction.

Improvement Thinnings.

32. Bamboos were thinned in block IV, Kullar, in five compartments; and in block II in two compartments over an area of 125 acres, at a cost of Rs. 380. The object of these operations was chiefly to relieve the mahogany plants.

In the Mudumalai leased forest, in block I, compartment 3, 67 acres were thinned at a cost of Rs. 496. The offer for the poles extracted is only Rs. 100, as they are for the most part crooked and valueless where they are, for small wood has little or no value near these large forest areas.

A further area of 98 acres was thinned in compartment 4 of the same block for Rs. 786. The materials sold for Rs. 715.

In the Ootacamund Range 16 acres of wattle were thinned out in Snowdon, at a cost of Rs. 72; the materials realised Rs. 236. Standards were left at 8 feet apart. Dead wood was not sold this year to any extent from the Moyar reserve; but in the Benné reserve 4,000 cubic feet of heads and butts of trees remaining after departmental fellings were sold for Rs. 1,200.

Fencing.

33. A barbed wire fence 550 yards long, with three strands, was put up in Sim's Park, Coonoor, along the supply channel at a cost of Rs. 145, the main object being to secure the nursery.

A trench, 2,486 yards long (with stone walls in rocky places), was dug in the Muthanad reserve at a cost of Rs. 340, and another to the length of 1,551 yards in the Kengodu reserve cost Rs. 185.

A ditch one mile in length was dug round the planted portion of Rallia at a cost of Rs. 181.

All existing fences were repaired.

Communications and Buildings

34. The total expenditure as compared with that of last year was—

	1888-89.	1889-90.
	RS.	RS.
Roads	9,234	9,752
Buildings	14,457	13,422
Other works	302	826
Total ...	23,993	24,000

It can hardly be said that the expenditure on these items was sufficient for the due development of the forests, but the hands of the establishment were tied in so many districts by settlement work that more attention to these heads could not be paid.

Roads.

35. The works in the various districts were—

Ganjam.—Roads begun both in East and West Goomsur. A road from Tarsingi to join the Tilsingi-Chondorgiri road was two-thirds completed, and a road from Niktiapalli to Ramba was half finished. Some work was done on the Kullada-Tilsingi road, and the Famine Relief Fund then took over the road, but did not complete it, and the work subsequently was very considerably damaged by the heavy monsoon and cyclone:—

	RS.
Spent on construction	987
Do. repairs	458
Total ...	1,445

Godávari.—In the Upper taluks the following work was done:—

	MILES.	RS.
Extension of Kunnavaram-Tatlanka road	2	237
Do. of Murmur do.	1	73
Do. of Jriguppa-Ramdeopet road	2½	156
Do. of Kenraspett-Bhundargudem road	2	315
Total ...		781

In the Lower taluks—

	MILES.	RS.
Levelling and ditching the Tirumalayapalem-Sudikonda road.	3½	211
Do. do. the Pidthamamidi-Timmapuram „	6	155
Marking of Mulagalampalli-Puchikapad road	10	62
Total ...		428
Total expenditure ...		1,209

Kistna.

	MILES.	RS.
Repairs to Komatigunta road	14	410
Constructing 1st section of Venkatayapalem road	20	570
Repairs to other roads		45
Spent on construction		570
Do. repairs		455
Total ...		1,025

Guddapah.—The work done was—

	RS.
20 chains Lankamalai road	55
1⅓ miles bridlepath along Chengalati pass	170
Ragimanipenta road	383
Road to Reddipalle plantation	60
Pathasallamgadu road extension	210
2½ miles Yerrapenta road	200
Balapalle-Váyalpád road extension	171
	1,249
Repairs ...	386
Total ...	1,635

Kurnool.

	MILES.	RS.
Construction of road in Nandikótkur range	4	1,021
125 yards of demarcation line in Nandyál cleared of stumps.	...	204
Cart-track to Mantrala house, 904 yards		200
Digamitta road		98
Foot-paths		72
Total ...		1,595

Bellary.—The work done was—

3⅓ miles of a ridge road (Gamble's road) were made in Rámandrug, work being commenced simultaneously in 3 sections.

4⅓ miles of bridle-road were made in the North-east reserve and Donemalai. Part of the expenditure was erroneously credited to Fire lines.

	RS.
Construction	771
Repairs	41
Total ...	812

Nílgiris.—The following was the work—

1½ miles cart-road to Rallia.
2 „ Inspection path in Northern Hay.
2 „ „ „ „ the Benne Forest.
6 furlongs bridle-road in Kullar.
6½ „ Cully road

	RS.
Construction	1,259
Repairs	765
Total ...	2,024

Buildings.

36. *Ganjam.*—The following buildings are now on the books in this district, considerable attention having been paid to this head :—

Rest-houses.

	Value RS.	RS.
1. Russellkonda.	1,500	
2. Berhampore	1,200	
3. Gullery	600	
4. Hatiguda	302	
5. Rambha	453	
6. Tilsingi	542	
7. Chandorgiri	836	
		5,433

Range-houses.

	Value.	
	RS.	RS.
1. Gayagonda	690	
2. Mojjagodo	500	
3. Suradá	400	
		1,590
16 Guards' and tannah huts		953

Besides these, houses at Tarsingi and Bonta are in course of construction. Hatiguda is still unfinished. The value entered does not represent the real value in most cases, for the figures shew the cost to the department exclusive of timber.

During the year the expenditure was—

	RS.
Construction	1,406
Repairs	400
Pay of watchers	352
Total ..	2,158

Godávari.—The houses on the books are—

Rest-houses.

	Value.	
	RS.	RS.
1. Rékapalle	700	
2. Murmur	800	
3. Jiriguppa	600	
		2,100

Range-houses.

	RS.
1. Marrigudem	350
8. Depôt and office sheds	236
10. Guards' and tannah huts	97

There are besides under construction and nearly completed—

Rest-houses.

4. Singavaram.
5. Chintur.
6. Bodigudem.

During the year the expenditure was Rs. 1,954.

Kistna.—The houses on the books are—

Rest-houses.

	Value.	
	RS.	RS.
1. Kondapalli	1,000	
2. Kondavid	1,010	
3. Remidicherla	1,000	
		3,010
10 Guards' and tannah huts		266

During the year the expenditure was Rs. 2,108.

Nellore.—The buildings are—

	RS.
1. Rest-house at Udayagiri	1,150

During the year the expenditure was Rs. 574.

Cuddapah.—The buildings on the books are—

Rest-houses.

	Value.	
	RS.	RS.
1. Kódúr	2,750	
2. Sanipaya	2,000	
3. Mogilipenta	950	
4. Balapalle	540	
5. Horsleykonda	4,000	
6. Vontimitta (Public Works Bungalow handed over to the Forest Department)	1,000	
		11,240

Range-houses.

	Value.	
	RS.	RS.
1. Ráyachóti	450	
2. Sidhout	530	
3. Rájampet	370	
4. Badvél	570	
5. Kódúr	1,000	
		2,920

Depôt sheds.

1. Kurapalli	250	
2. Kódúr	150	
3. Polisettivandlapalle	20	
4. Vontimitta	250	
		670
81 Guards' and tannah huts		1,463

Among the work done for the year was the completion of the office building at Horsleykonda, with the exception of doors and windows. The building was purchased for Rs. 4,000 from Forest funds and considerable expense has been made since on repairs and out-buildings. It has now been decided by Government that the District Forest-officer is to spend only 30 days in the year at Horsleykonda, and that it is to be regarded as a general sanitarium. It is not known whether the cost incurred by the Forest Department is to be reimbursed, and, if so, from what source. The total expenditure during the year was Rs. 1,653.

Kurnool.—The buildings on the books are—

	RS.
1. Head-quarters bungalow at Nandyál	11,000

Rest-houses.	Value. RS.	
1. Rollapenta	1,200	
2. Bainuti	1,200	
3. Mantrala	800	
4. Buswapur (bought from Railway)	1,500	
		4,700
Range-houses.		
1. Dornal	400	
2. Kistnamchettipalle	150	
		550
31 Guards' and tannah huts		2,084

The building at Mantrala is still unfinished, having taken a very excessive time to complete. The total expenditure during the year was Rs. 2,544.

Bellary.—The buildings are—

	RS.
1 Rest-house at Donemalai	500
1 Range-house at Sandúr, unfinished	561
3 Guards' and tannah huts	35

During the year the expenditure was Rs. 596.

Anantapur.—The buildings are—

	RS.
1 Head-quarters bungalow at Anantapur	6,991
Rest-houses.	
1 Konapanainapalle	800
1 Gollah (a Local Fund bungalow handed over to the Forest Department)	5,000
15 Guards' and tannah huts	79

During the year the expenditure was Rs. 469.

Nilgiris.—The houses are—

Rest-houses.	Value. RS.	RS.
1. Kullar	1,500	
2. Rallia	360	
		1,860
5 Range-houses	970	
43 Guards' and tannah huts	2,415	
		5,245

A rest-house at Benne is under construction, and a range-house at Mudumalai.

During the year the expenditure on various smaller buildings and on repairs was Rs. 1,350.

37. *Tramways.*—The following statement has been specially prepared to shew the working of this tramway :—

STATEMENT shewing the working of Tramway in Nellore District.

Names of localities where tramway planted.	Length of line of Tramway planted.	Quantity of wood carried in					Total quantity (columns 3 to 7).
		1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	
1	2	3	4	5	6	7	8
	M. F. Y.						
Tammenapatam ..	1 0 0	1,891	164	..	..	249	2,304
Kothapatam	2 4 0	..	1,872	..	2,066	255	4,193
Śrîharikóta (Penubakam).	2 5 90	..	..	..	..	137	137
Average ..	6 1 90	1,891	2,036	..	2,066	641	6,634

Names of localities where tramway planted.	Total quantity in tons for 1 mile (columns 2 × 8).	Actual cost of carrying the above by tramway.	Interest at 4 per cent. per annum and allowance for deterioration of plant at 1 per cent. per annum on the original cost of the tramway for 5 years.	Total cost by tramway (columns 10 and 11).	Probable cost of carrying the same by common carts.	Average cost per ton per mile by tramway.	Average cost per ton per mile by common carts.
	9	10	11	12	13	14	15
		RS.	RS.	RS.	RS.	RS. A. P.	RS. A. P.
Tammenapatam ..	2,304	434	3,894	5,750	11,548	0 7 2	0 14 5
Kothapatam	10,483	1,422					
Śrîharikóta (Penubakam).	367	186	* ..	† 186	79	0 8 1	0 3 5
Average ..	13,154	2,042	3,894	5,936	11,627	0 7 8	0 14 2

* Nothing has been entered in this column, as the tramway is quite new and has not deteriorated in any way.

	RS. A. P.		RS. A. P.
† Clearing jungle	35 11 0	Storing charges	10 4 0
Fixing sleepers	17 3 9	Constructing huts for tramway ..	15 3 6
Earthwork	2 13 4	Sundry charges for repairs, &c. ..	6 3 6
Planting pegs along the sleepers ..	4 5 4	Actual cost of wood carried ..	25 13 11
Oil for wheels	7 14 0		
Boat-hire for carrying rails from Madras.	54 10 8	Total ..	186 7 0
Boat-hire for carrying wagons from Kanupur.	6 4 0		

The figures shew a very great saving by means of the tramway. In fact Nellore is a district where a tramway must pay, and largely by comparison with carts, for in the first place the ground is level, and the line therefore easily laid; in the next place the soil is sandy, so that the cost of carting is abnormally expensive, enhancing the difference obtained by a comparison with the cost of transport by tramway. It is easy enough to push the tramway so as to render it workable. In the third place there is a ready market in Madras.

38. *Boats.*—There were no boats bought or constructed during the year, but three small boats for the use of subordinates are under construction.

39. *Elephants.*—As last year; and reported in good health.

CHAPTER V.

YIELD AND WORKING.

40. The following is the outturn statement for the year (as called for by Government in G.O., No. 153, of 5th March 1889) compared with that of the previous year. Districtwar statements for collection by Government agency and removal by purchasers are given in the respective abstracts of forms 69 and 72.

ABSTRACT K.—Comparative yield.

Heads.	TIMBER IN CUBIC FEET, INCLUDING SANDAL-WOOD.		FUEL IN CUBIC FEET.		BAMBOOS IN NUMBER.		MINOR PRODUCE GROSS VALUE IN RUPEES.	
	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.
By Government agency.	261,203	* 121,225½	868,460	† 851,983	78,268	‡ 108,386	8,728	12,566
By purchasers, including drift and confiscated ..	1,498,554	1,547,912	6,257,324	4,459,179	4,679,953	7,056,288	1,16,185	1,33,950
Free grants	35,631	15,630	14,818	230	130,050	13,989	..	400
Total ..	1,795,388	1,684,767½	7,140,602	5,311,392	4,888,271	7,178,663	1,24,913	1,46,916
Difference in 1889-90 as compared with 1888-89.	— 110,620½		— 1,829,210		+ 2,290,392		+ 22,003	

* Includes 504½ cubic feet, being excess found on remeasurement of timber collected and taken to depôt in previous years.
† Do. 276 do. do. do. of fuel do. do.
‡ Do. 20 number do. in the number collected and taken to depôt in previous years.

There was a decrease during the year under report in the total yield compared with the totals of the previous year, of 6 per cent. under timber and 25 per cent. under fuel, and an increase of 47 per cent. under bamboos and 13 per cent. under minor produce. There was a considerable falling off in the revenue realized from both timber and firewood removed by purchasers.

The receipts, however, for bamboos during the two years under both I and II are almost identical; and it is clear that there is some error in the numbers. This error seems to be in the returns for Kurnool last year, where 11,000 odd cart-loads of bamboos were entered as 11,000 bamboos.

SECTION 1.—DEPARTMENTAL OPERATIONS (FORMS 68, 69, 70, 71 AND 73-A).

41. The following gives a comparison of the trees felled departmentally in two years :—

ABSTRACT L.—Trees felled and converted (see Form 68).

Opening balance, 1888-89.	Felled, 1888-89.	Felled, 1889-90.	Converted, 1888-89.	Converted, 1889-90.	Balance carried forward.
395	19,023	26,567	18,931	26,419	635

Although the number of trees was greater the cubical contents were considerably less than in the previous year; the number of large trees felled in Ganjam being fewer during the year, and the number of smaller trees in Kistna and Nílgiris greater.

42. The following abstract compares the produce collected and disposed of for two years :—

ABSTRACT M.—Produce collected and disposed of (see Forms 69, 70, 71 and 73-A).

—	PRODUCE COLLECTED.						
	During 1888-89.			Stock at the beginning of 1889-90.	During 1889-90.		
	Quantity.	Cost.	Average.	Quantity.	Quantity.	Cost.	Average.
1	2	3	4	5	6	7	8
		RS.	RS. A. P.			RS.	RS. A. P.
Timber .. .. C. ft.	260,441	33,277	0 2 0	206,974	120,442½	21,857	0 2 11
Firewood .. .. ,,	868,460	38,524	0 0 9	748,983	851,983	37,404	0 0 8
Bamboos .. .. No.	78,268	549	0 0 1	17,791	108,386	897	0 0 2
Sandalwood .. C. ft.	762	1,830	2 6 5	..	783	1,856	2 5 11
Minor produce .. Mds.	8,538	4,535	0 8 6	5,992½	25,306	5,643	0 3 7
Total ..	..	78,715	..	..	..	67,657	..

ABSTRACT M.—Produce collected and disposed of (see Forms 69, 70, 71 and 73-A)—*cont.*

	Produce disposed of					
	During 1888-89.			During 1889-90.		
	Quantity.	Sales.	Average.	Quantity.	Disposals.	Average.
	9	10	11	12	13	14
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber .. .. C. ft.	55,677	20,717	0 5 11	148,322	43,599	0 4 9
Firewood .. .. ,,	661,111	61,812	0 1 6	675,347	59,474	0 1 3
Bamboos .. .. No.	58,187	1,615	0 0 5	112,686	2,745	0 0 5
Sandalwood .. .. C. ft.	796½	6,965	0 8 11	740	5,616	7 9 5
Minor produce .. Mds.	8,792	8,728	0 15 11	26,434½	12,566	0 7 7
Total ..	..	99,837	..	..	1,24,000	..

Out of the amount of Rs. 1,24,500 only Rs. 1,13,896 was realized during the year. The net surplus under this section was therefore Rs. 46,239 and there were increased returns at a lower actual expenditure, but the value of stock in depôts was diminished as shown below.

43. There was a considerable discrepancy between actuals and the budget figures as will be seen by the following :—

	Receipts.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.
As per revised budget	1,48,950	71,950	77,000
Actuals as per form No. 64	1,13,896	67,657	46,239
Difference ...	— 35,054	— 4,293	— 30,761

Against this however there is a balance of some Rs. 10,000 due for wood supplied but not paid for during the year, chiefly from Ganjam. The price of casuarina wood in Nellore fell lower during the year than in any previous year.

In the Nílgiris the value of wood in the plantations also fell very considerably for want of a sufficient market, and there were short sales of timber from Mudumalai and Benne, because of the failure of a firm who had contracted for large purchases.

In Cuddapah the price of red sanders also remained abnormally low, and the market was dull.

44. The value of stock in depôts was diminished by Rs. 20,712 as shown below :—

Districts.	On hand at commencement.	On hand at close.	Difference.
	Rs.	Rs.	Rs.
Ganjam	14,374	1,971	— 12,403
Godávari	..	456	+ 456
Nellore	11,847	2,837	— 9,010
Cuddapah	23,997	24,552	+ 555
Bellary	42	190	+ 148
Anantapur	380	3	— 377
Nílgiris	2,547	2,466	— 81
Total ..	53,187	32,475	— 20,712

The chief stock is of sal sleepers in Ganjam, fuel in the Nílgiris and Nellore, and red sanders in Cuddapah.

SECTION 2.—REMOVALS BY PURCHASERS (FORM No. 72-A).

45. The following abstract shews the removals by purchasers under permits or licenses for two years :—

ABSTRACT N.—Produce removed by permit-holders (Form No. 72-A).

Produce.	During 1888-89.			During 1889-90.		
	Quantity.	Amount of sales.	Average.	Quantity.	Amount of sales.	Average.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber .. .. C. ft.	1,442,261	1,18,413	0 1 4	1,457,016	1,25,594	0 1 5
Firewood .. .. ,,	6,249,532	1,02,548	0 0 3	4,429,766	82,292	0 0 4
Bamboos .. .. No.	4,672,432	52,590	0 0 2	7,038,404	49,315	0 0 1
Grass and grazing .. Mds.	151,572	79,454	0 8 5	158,809	78,327	0 7 11
Minor produce .. ,,	3,000,325	1,46,996	0 0 9	1,794,009	1,33,835	0 1 2
Total ..	..	5,00,001	..	..	4,69,363	..

The amount actually realized during the year, including outstandings, was Rs. 4,70,366. The net decrease during the current year was therefore Rs. 29,635.

The decrease in Ganjam may be explained by the famine and abnormal rain afterwards.

The decrease in Kistna was due to a short demand for babul wood, and to slightly lower rates offered for grazing leases.

In Cuddapah there was a considerable decrease under timber and fuel, chiefly because many of the blocks near the railway lines have been worked out, and an attempt was made to regulate the supply of fuel to the railway, which had heretofore been hardly checked.

In Kurnool the very large decrease was due to less demand from the railway.

In Bellary the decrease was apparent rather than real, for a sum of Rs. 5,000 for quarries on unreserved land was wrongly credited to forests last year.

In Anantapur the decrease is explained by a smaller demand for tangedu since the price has been raised.

There were, however, increased receipts in Godávari under timber and fuel taken together, though there was a decrease under timber alone, because of increased precautions being taken in issuing licenses; and there was an increase under minor produce.

In Nellore there was a slight increase under timber and firewood and grazing, and a considerable increase under minor produce.

In Cuddapah there was a considerable increase also under minor produce, owing to fairer prices being received for amroy sales, not in consequence of any additional drain on the forests.

46. The confiscations for two years were as follows:—

ABSTRACT O.—Confiscation (see Form No. 72-B).

	During 1888-89.			During 1889-90.		
	Quantity.	Amount realized.	Average.	Quantity.	Amount realized.	Average.
		RS.	RS. A. P.		RS.	RS. A. P.
Timber .. .. C. ft.	56,293	11,177	18 1 3	90,896	12,087	13 4 9
Firewood .. .. ,,	9,592	343	3 9 3	29,413	745	2 8 6
Bamboos .. .. No.	7,521	86	1 2 4	17,884	171	0 1 6
Minor produce in maunds of 25 lb. each	1,186	925	* 77 15 11	7,497	115	0 8 6
Total ..	..	12,531	..	..	13,118	..

* This large average is due to the omission of quantity in some districts in 1888-89.

SECTION 3.—FREE GRANTS OF FOREST PRODUCE.

47. The following shews the free grants made by Collectors and District Forest-officers and their value for two years:—

ABSTRACT P.—Free grants.

Districts.	Timber.	Firewood.	Bamboos.	Minor produce in maunds of 25 lb. each.	Money value.
	C. FT.	C. FT.	NO.	MDS.	RS.
Ganjam	..	..	..	..	..
Vizagapatam	80	30	6,144	..	161
Godávari	1,440	..	..	..	154
Kistna	120	200	..	..	33
Nellore	11,350	..	..	4,020	1,215
Cuddapah	400	..	1,725	..	39
Kurnool	1,320	..	6,120	..	146
Bellary	..	..	..	1,800	320
Anantapur	..	..	..	..	..
Nilgiris	920	..	..	..	863
Total ..	15,630	230	13,989	5,820	2,931
Free grants of last year ..	35,631	14,818	130,050	..	7,986

These statistics give the recorded free grants, but give no idea of the vast amount of forest produce consumed, chiefly from unreserved lands, by unrecorded privileges.

CHAPTER VI.

FINANCIAL RESULTS.

48. The revenue and expenditure is given in form No. 64.

The following abstract gives the cash results for five years:—

ABSTRACT Q.—Cash results from 1885-86.

—	For 1885-86.	For 1886-87.	For 1887-88.	For 1888-89.	For 1889-90.	Revised estimate for 1889-90.	The year under report compared with the previous year.	The year under report compared with the revised estimate.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Revenue	5,46,282	5,52,248	5,64,723	6,16,920	6,06,610	6,40,000	— 10,310	— 33,390
Expenditure.								
A. "Conservancy and works"	1,88,930	2,20,443	2,18,009	2,54,298	2,18,513	2,46,680	— 35,785	— 28,167
B. "Establishments" ..	2,12,887	2,14,523	2,35,785	2,20,244	2,39,817	2,53,320	+ 19,573	— 13,503
Total Expenditure ..	4,01,817	4,34,966	4,53,794	4,74,542	4,58,330	5,00,000	— 16,212	— 41,670
Net results ..	1,44,465	1,17,282	1,10,929	1,42,378	1,48,280	1,40,000	+ 5,902	+ 8,280

The net surplus is greater although the gross revenue was lower during the year.

Until settlement is finished and the establishment is strengthened it is impossible to forsee accurately the capabilities of the forest; but the results will be better than those of the year under report.

The increase under establishment was owing to the higher pay of the Conservator as compared with that of the Acting Conservator last year, to promotion of superior officers, and to higher travelling allowance on the whole under the system of daily as against fixed allowances.

49. Form No. 67 gives the distribution of revenue and expenditure under the three heads of "Departmental timber works," "other revenue," and "improvement of forests." The ratios adopted are the same as those of last year, viz., Vizagapatam 1, Bellary 2 and the rest 3 twenty-fifths.

The deficit under "timber operations" would have been a surplus had the value of Ganjam sleepers been paid, and had not the rate for Cuddapah red sanders not fallen from 17 or 18 rupees a ton to 10 or 13.

50. Form 73 (*a*) and 73 (*b*) shew the comparison between the value of timber and plant respectively at the beginning and the end of the year. In order to compare the surplus to the credit of the department this year with that of last year, the same form is adopted, viz.:—

	RS.
Net revenue	1,48,280
Outstanding revenue	13,011
Difference of value of plant, 73 (*b*)	16,751
Total ...	1,78,042
Deduct difference of value of timber, 73 (*a*) ...	20,712
Surplus to credit ...	1,57,330

The surplus for the year 1888-89 calculated in the same way was Rs. 2,03,713, leaving a comparative balance against the year under report of Rs. 46,383.

CHAPTER VII.

GENERAL REMARKS.

51. The Acting Conservator can find definite opinions of Mr. Gamble about only a few of the officers. In his inspection report on Cuddapah, Mr. Gamble thus records his opinion of the work of Mr. Lodge: "I have only to express my satisfaction with the excellent work done by Mr. Lodge in a district which ought really to be the charge of about four officers of his standing."

In his report on Mr. Battie's work, Mr. Gamble says: "I can now end by expressing my satisfaction at the good state in which I found the forest work in Godávari. The great point about it is that what has been done has been done thoroughly: there have been none of the half and half works which one so frequently finds, and no excuses for not carrying out orders."

In his report on Mr. A. W. Lushington's work, Mr. Gamble says: "I regret that I cannot express myself as fully pleased with the conditions of forest work in Ganjam. There is a want of method and system, and an absence of attention to the rules and orders of authority; but the District Forest-officer works hard, is energetic and enthusiastic himself, and in some respects has done excellent work."

In his report on Kistna, Mr. Gamble writes: "Mr. Alwar Chetti, B.A., Sub-Assistant Conservator, is anxious to work hard. His office was in fair order, and his settlement and demarcation work well done; but in the field, work is undoubtedly a little slack. I am afraid that this is due to want of experience." In fact this officer has had no departmental training, for he was specially appointed for training at Dehra Dun; and as the department was short-handed, he was appointed to the charge of a district on his return.

There are no definite statements about the other officers.

52. The following remarks are gathered from the district reports:—

Ganjam.—Mr. Newman, Ranger, is said to have done well, and Mr. McLaughlin, Ranger, fairly. The temporary Forester, Mir Rashid-ud-din, is commended. The year was very unhealthy. There was famine at one period and excessive rain at another.

Vizagapatam.—The Pálkonda Ranger, Nagarazu, is said to have worked well.

Godávari.—The work of Mr. Stafford, Sub-Assistant Conservator, is said to have been unsatisfactory, and he was temporarily reduced in consequence. He has been transferred to Bellary.

Ranger A. Eggia Sastry is very highly commended, and the work of Ranger Viswanatham Pantulu is commended.

The year was very unhealthy, and the deaths are reported of two Foresters, two Forest Guards, and one Tannahdar.

The rainfall at Wuddagudem was 81 inches, the heaviest rainfall being registered on the 18th September when 12·5 inches fell.

Kistna.—The work of all the Range officers is said to have been good, except in the case of Mr. Tweedie and Forester S. John.

Nellore.—The work of Rangers Venkatesa Mudali, T. Shunmuga Mudali, and Balaji Sing is commended, and also that of Head Guard Sanker Sing, who held charge of a range.

Rainfall 30 inches, but very unequally distributed. A storm-wave destroyed almost all the new planting at Dugarázpatnam.

Cuddapah.—The work of Mr. Gaudoin is specially commended. The year was very unhealthy; a Forest Guard, a Tannahdar and a Depôt peon died.

Kurnool.—One Ranger was dismissed during the year. The year was unhealthy; two Forest Guards died at Márkápur and Cumbum.

Bellary.—The work of Ranger Kodundarama Mudali was unsatisfactory. There was no serious illness.

Anantapur.—The work of Eggia Narayana Sastry is commended, also of Forester Ramasawmy Iyah. The work of Forester Srinivas Hebbar was very unsatisfactory.

Health generally fair.

Nilgiris.—The work of Rangers P. Ramalingam Pillay, Sundram Pillay and C. Venkataramaniah is specially commended, and also of Foresters Seager, Allen and Raghaviah.

There was much illness as usual in Sígúr, Mudumalai and Kullar, and the establishment and coolies suffered much. One Forester died during the year.

53. *Service Registers*—have been regularly posted in all districts.

54. *Forest School.*—Only one Ranger, Kalyanarama Iyer, was sent during the year from Anantapur district. Forester Rama Row returned with a Ranger's certificate, and was promoted to a post of Acting Ranger.

APPENDIX A.

Experiments and Exotics.

Arabian Dates.

In *Godávari* there are some 100 date trees in various reserves 1 to 2 feet high.

In *Kistna* the plants in the Weld plantation grow fairly, but no new work was attempted. The Conservator during the year decided that these experiments should be carried on on a larger scale if at all; and preparations are being made to have plantations of from 80 to 100 acres in some districts.

In *Nellore* there are some 700 trees at Sríharikóta thriving fairly. An experiment was made at Dugarázpatnam, but was discontinued owing to the brackish water. An experiment was then made at Allipuram casuarina plantation, which is part of the bed of the Pennér: 6,000 pits were sown with three seeds in each, but the experiment was a total failure, it is supposed because the seed which had been procured in the local market was damaged.

In *Cuddapah* there are 130 Egyptian dates out of 200 seeds sown, and out of 2,220 Persian date seeds 680 died, and the rest are doing well in baskets.

In the *Nilgiris* a small experiment has been commenced with Cabul dates: out of 46 seeds 36 germinated and are doing well at Kullar.

The dates at Moyar, from seed got from bazaar fruit, grow slowly, being much attacked by hares.

Mahogany.

The mahogany plantation at Kullar, at the foot of the Coonoor Ghât, is still thriving well. The trees are planted at intervals without felling the intervening natural forest. Some of the trees are now 17 feet high (planted in 1885-86).

The seedlings of the variety *Swietenia macrophylla* planted last year have been all basketted, and will be planted near Sígúr.

The *Swietenia macrophylla* planted last year at Kullar are all healthy, and out of 9,000 seeds received from Calcutta 8,325 seedlings came up during the year, and have been planted in the Kullar reserve.

The Mahogany has failed at Nellore and 34 trees in Cuddapah, at Arimanibanda, are not flourishing.

Eucalyptus.

Besides the ordinary plantations of blue gum and red gum on the Nílgiris, experiments were made last year with some seed sent by the Board. Most of these experiments failed, but it is reported from Godávari that 250 seedlings (chiefly "robusta" it is believed) are doing well.

Of the 47 trees in Cuddapah, planted out at Mogilipenta, six died and the rest are healthy.

Experiments in the Nílgiris have been made with various species.

In Sim's Park were planted 30 *Eucalyptus siderofolia*, 173 *Eucalyptus corymbosa*, and are doing well.

In the nursery are—

18 *Eucalyptus citriodora*,	20 *Eucalyptus regnano*,	15 *Eucalyptus stricta*,
30 „ *microtheca*,	25 „ *Stuartiana*,	28 „ *polyanthema*,

and in Lovedale there are seedlings of *Eucalyptus amygdalina*, *Gunnii*, *botryoides*, *leucoxylon*, and *ganiocaly*.

Experiments various.

In the *Nilgiris* large experiments have been made with *Frenela rhomboidea*, *Cupressus macrocarpa*, *Casuarina suberosa*.

In Sim's Park the following have been planted :—

178 *Syncarpia laurifolia*.
35 Olive.
6 *Dendrocalamus Hamiltonii*.
6 „ *Sikkimensis*.

The following seeds were sown and are growing in the nursery :—

500 *Acacia pycnantha*.	*Pinus Laricio Austriaca*.	*Picea excelsa*.
„ *brachij botriya*.	„ *pinea*.	*Abies Pinsapo*.
Boronia megastigma.	„ *Halepensis*.	

A variety of other Conifers have been sown, but the seeds have not yet germinated. Some of these species may be found to grow well and rapidly on the Nílgiris. Experiments are also succeeding with Red sanders, *Caryota urens*, *Dipterocarpus alatus* and others.

Besides this some 4,000 Vengai seedlings and 4,500 Teak seedlings were planted in the Kullar reserve, the object being by degrees to transform this forest into a forest of valuable trees, such as Teak, Vengai and Mahogany.

In other districts the experiments are not carried on so systematically. Some experiments have been made in Cuddapah with *Corypha elata*, Teak, Carob (a few seedlings) and *Erythroxylon coca*, of which 15 plants are thriving at Balapalle.

In Nellore experiments with Sissu, Ironwood, Mahogany, Caryota were more or less failures, but an experiment in growing bamboos seems successful.

APPENDIX B.

STATEMENT shewing the cost and yield up to 31st March 1890 of the casuarina plantations in Nellore and Gúdúr taluks.

Plantation.	Compartment No.	Area.	Year of planting.	Total expenditure up to 31st March 1890.	Cost per acre.	Approximate return up to 31st March 1889.		Yield during 1889-90.					Approximate return during 1889-90.		Grand Total.	
						Yield up to 31st March 1889.	Amount.	Section felling.	Dead-wood cutting.	Clean felling.					Total tons—7 and 13.	Total amounts—8 and 15.
								Tons.	Tons.	Area.	Tons.	Total.	Rate.	Amount.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Rs.	Rs.		Rs.						Rs.	Rs.		Rs.
Dugarázpatam ..	1 & Extra interplanted.	45	1873 1874	10,132	225	1,835	10,715	..	3	..	..	3	4	12	1,838	10,727
	2	26	1874	6,908	276	590	3,539	..	..	..	..	..	..	..	590	3,539
	3	30	1875	6,449	215	754	4,524	..	..	..	..	..	..	..	754	4,524
	4	59	1880	3,397	57	549	3,289	330	17	..	..	347	..	1,388	896	4,677
	5	104	1881	4,416	42	858	4,968	32	24	..	..	56	..	224	914	5,192
	1882	4	1882	..	..	33	194	..	..	..	..	..	..	..	33	194
	1883	73	1883	3,585	49	29	160	..	67	..	..	67	..	268	96	428
	1884	60	1884	2,583	43	9	54	..	..	..	..	..	..	..	9	54
	1885	30	1885	1,531	51	..	..	..	..	..	..	..	..	..	..	..
	1886	60	1886	425	7	..	..	..	..	..	..	..	..	..	..	..
	1887	100	1887	1,012	10	..	..	..	..	..	..	..	..	..	..	..
	1888	80	1888	1,520	19	..	..	..	..	..	..	..	..	..	..	..
	1889	70	1889	210	3	..	..	..	..	..	..	..	..	..	..	..
Village tope, casuarina	1883	4	1883	132	33	..	..	..	..	4	43	43	..	172	43	172
Ebrow's tope ..	Resumed by Government under Tope Rules.					504	3,024	..	..	..	..	..	..	..	504	3,024
Salt tope	..	4	..	..	..	35	210	..	..	..	..	..	..	..	35	210
6 Islands in backwater	..	7	1880-83	..	..	6	30	..	..	..	..	..	..	..	6	30
Kottapatam ..	1 Interplanted.	24	1873 1874	6,005	250	1,154	6,924	..	..	..	..	..	..	..	1,154	6,924
	2	24	1874	6,536	272	884	5,304	..	..	..	..	..	..	..	884	5,304
	3	32	1875	6,170	193	1,496	8,976	..	..	..	..	..	..	..	1,496	8,976
	4	40	1880	3,082	77	243	1,413	..	30	..	..	30	..	120	273	1,533
	5	112	1881	4,408	39	1,073	6,321	..	13	..	..	13	..	52	1,086	6,373
	1882	16	1882	..	..	..	..	..	..	..	..	..	..	..	..	..
	1883	22	1883	1,046	48	33	166	..	7	..	..	7	..	28	40	194
	1884	37	1884	1,591	43	..	..	..	..	..	..	..	..	..	..	..
	1885	30	1885	986	33	..	..	..	..	..	..	..	..	..	..	..
	1886	25	1886	222	9	..	..	..	..	..	..	..	..	..	..	..
	1887	50	1887	1,491	30	..	..	..	..	..	..	..	..	..	..	..
	1888	50	1888	934	19	..	..	..	..	..	..	..	..	..	..	..
	1889	30	1889	208	7	..	..	..	..	..	..	..	..	..	..	..
Chattram tope ..	Resumed by Government under Tope Rules.					120	720	..	..	..	..	..	..	..	120	720
Pamangi do. ..						169	1,014	..	..	..	..	..	..	..	169	1,014
Royalpalem tope ..	..	..	..	..	..	13	65	..	..	..	..	..	..	..	13	65
Tamminapatam ..	1 Interplanted.	41	1873 1874	12,143	296	769	4,614	..	..	..	..	..	..	..	769	4,614
	2	59	1874	9,576	162	1,008	6,048	..	..	..	..	..	..	..	1,008	6,048
	3	29	1875	7,878	272	587	3,522	..	..	..	..	..	..	..	587	3,522
	4	64	1880	3,808	59	140	840	223	14	..	..	237	..	948	377	1,788
	5	139	1881	5,779	42	126	756	..	29	..	..	29	..	116	155	872
	1882	81	1882	84	1	182	1,092	..	..	..	..	..	..	..	182	1,092
	1883	68	1883	2,392	35	1	6	..	..	..	..	..	..	..	1	6
	1884	30	1884	1,267	42	..	..	..	..	..	..	..	..	..	..	..
	1885	10	1885	381	38	..	..	..	..	..	..	..	..	..	..	..
Around wells of No. 1	1886	4	1886	242	60	..	..	..	..	..	..	..	..	..	..	..
Resumed by Government under ..	..	4	Tope Rules.		..	118	708	..	..	..	..	..	..	..	118	708
Around wells of Nos. 2 and 3 ..	1887	20	1887	1,046	52	..	..	..	..	..	..	..	..	..	..	..
Around wells of Nos. 2 and 3 ..	1888	20	1888	533	26	..	..	..	..	..	..	..	..	..	..	..

Statement shewing the cost and yield up to 31st March 1890 of the casuarina plantations in Nellore and Gúdúr taluks—*cont.*

Plantation.	Compartment No.	Area.	Year of planting.	Total expenditure up to 31st March 1890.	Cost per acre.	Approximate return up to 31st March 1889.		Yield during 1889-90.					Approximate return during 1889-90.		Grand Total.	
						Yield up to 31st March 1889.	Amount.	Section felling.	Deadwood cutting.	Clean felling.			Rate.	Amount.	Total tons—7 and 13.	Total amount—8 and 15.
								Tons.	Tons.	Area.	Tons.	Total.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Rs.	Rs.		Rs.						Rs.	Rs.		Rs.
Utukur	1	32	1875	7,527	235	94	470	..	..	..	..	..	..	..	94	470
	2	32	1880	3,927	122	22	120	..	..	..	..	..	..	..	22	120
	3	84	1881	4,772	57	8	40	..	..	..	..	..	..	..	8	40
Varani	1 Interplanted	40	1873 1874	10,339	258	58	290	..	230	..	..	230	4	920	288	1,210
	2	40	1874	8,911	223	115	575	..	318	..	..	318	..	1,272	433	1,847
	3	40	1875	8,108	202	50	250	..	121	..	..	121	..	484	171	734
	4	40	1880	3,189	80	35	175	..	113	..	..	113	..	452	148	627
	5	80	1881	4,178	52	12	60	..	184	..	..	184	..	736	196	796
	1883 & 84	3	1883 and 84	121	40	..	..	..	..	..	..	..	..	..	..	..
Iskápalle	..	6	1870	960	160	104	520	..	..	..	..	..	..	..	104	520
Allipuram	1	18	1870	8,580	476	146	730	..	..	..	..	..	..	..	146	730
	2	36	1881	707	20	..	..	..	..	..	85	85	4	340	85	340
Total ..	..	2,287	..	1,81,427	80	13,962	82,426	585	1,170	4	128	1,883	4	7,532	15,845	89,958
Excess in weighing..												9				
												1,892				

APPENDIX C.

STATEMENT shewing the yield of several compartments felled and thinned during the year 1889-90 according to the plan of operations, Nilgiri district.

Range.	Working circle.	Name of the reserve and block.	Compartment.	Area thinned or felled.		Age when thinned or felled.	Number of trees felled.	Firewood.								Total yield in cubic feet.	Number of belt trees.	Number of standards left.	Total trees.	Estimated quantity of standing trees in cubic feet.	Total yield in cubic feet.	Yield per acre in cubic feet.
								Firewood.		Branchwood head-loads.		Branchwood bullock-loads		Drag poles.								
				Acrs.	Cents.			Lots.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.							
1	2	3	4	5		6	7	8		9		10		11		12	13	14	15	16	17	18
Coonoor.	Coonoor Peak.	Block No. I.	2	7	4	16	411	120	12,000	..	..	..	..	..	..	12,000	100	84	184	1,288	13,288	1,898
	..	..	9	5	8	16	529	133	13,300	1,637	1,637	41	164	..	..	15,101	..	201	201	1,407	16,508	3,300
	..	Block No. II.	12	4	1	16	815	290	29,000	1,487	1,487	156	624	..	..	31,111	..	246	246	1,722	32,833	8,208
	..	Do. ,, III.	26	2	9	16	1,200	297	29,700	1,677	1,677	45	180	..	..	31,557	..	236	236	1,652	33,209	16,602
	..	Do. ,, IV.	29	5	6	16	2,363	574	57,400	3,960	3,960	171	684	852	852	62,896	350	307	657	4,599	67,495	13,495
	Bandy Shola.	North block..	7	3	95	33	276	119	11,900	1,213	1,213	150	600	..	..	13,713	..	83	83	581	14,294	3,575
	..	South ,, ..	27	2	7	33	54	21	2,100	1,016	1,016	141	564	..	..	3,680	..	..	..	..	3,680	1,840
	Bleak-house.	..	1	7	..	..	363	59	5,900	2,313	2,313	63	252	..	..	8,465	..	..	..	..	8,465	1,209
	..	..	5	9	..	..	1,347	218	21,800	5,055	5,055	156	624	..	..	27,479	17	538	555	3,885	31,364	3,485
	Rallia Reserve.	..	4	7	60	19	988	234	23,400	710	710	..	..	..	..	24,110	550	5,030	5,580	39,060	63,170	8,312
Ootacamund.	Cairn Hill.	..	5	5	50	..	2,599	359½	35,950	5,165	5,165	..	..	..	..	41,115	..	..	..	..	41,115	7,475
	Aramby ..	..	5	5	25	..	1,867	297½	29,750	2,139	2,139	..	..	..	..	31,889	..	..	..	..	31,889	6,074
	..	..	10	6	..	..	1,726	343	34,300	2,887	2,887	..	..	..	..	37,187	275	..	275	4,650	41,837	6,973
	..	..	13	2	50	..	1,320	151½	15,150	862	862	..	..	..	..	16,012	..	..	..	..	16,012	6,405
	Governor's Shola.	Choughatcully.	1	12	..	..	1,989	410	41,000	3,899	3,899	..	..	..	..	44,899	474	..	474	11,250	56,149	4,679
		Governor's shola.	3	11	..	..	2,071	367	36,700	1,417	1,417	..	..	..	..	38,117	272	..	272	4,650	42,767	3,888

APPENDIX D.

STATEMENT shewing free grants during the year 1889-90.

District.	Authority under which granted.	Range.	Locality.	Name of grantee.	Purpose for which granted.	PRODUCE GRANTED.		
						Description.	Number or quantity.	Value.
								RS. A. P.
Ganjam		*Nil.*						
Vizagapatam	Ranger...	Pálkonda	Mallikonda ...	Inhabitants of Garugupalli.	Irrigation works.	Third-class timber.	C. ft. 40	5 0 0
			Addukonda ...	Do. of Pambara.	Do.	Do. do. ...	,, 40	
	Tahsildar.	Sarvasiddhi.	Pedapalli	Kolli Ramaya ...	Fencing ...	Bamboos ...	No. 6,144	154 0 0
				Modem Chinnaya ...	Boiling jaggery...	Brushwood ...	C. ft. 20	1 4 0
						Do. ...	,, 10	0 10 0
						Total ...	C. ft. 110 No. 6,144	160 14 0
Godávari	Collector.	Rámachandrapuram.	Bikkavole ...	Inhabitants of Bikkavole village.	For erecting new houses.	Palmyra trees ...	C. ft. 820	123 0 0
			Alamur ...	Village officers ...	For erecting bridges over drains.	Tumma do. ...	,, 620	31 0 0
						Total ...	C. ft. 1,440	154 0 0
Kistna...	Collector.	Palnád ...	Madinapad reserve.	Inhabitants of Dáchepalle.	To rebuild their houses burnt.	Palmyra trees No. 8.	C. ft. 120	20 0 0
						Firewood ...	,, 200	12 8 0
						Total ...	C. ft. 320	32 8 0
Nellore.	Collector.	Nellore ...	Golagamoody...	Padikam Raju, Voosa Venkayya and others.	To rebuild their houses burnt.	Palmyra trees ...	54	54 0 0
			Kakupally ...	Pambaty Chinnayya, Nagaya, &c.	Do. do. ...	Do. ...	72	72 0 0
			Kakutur ...	Anana Narayudu, Ponnusamy, &c.	Do. do. ...	Do. ...	50	50 0 0
			Paidoor ...	Sadagiri Veeraya, Koorapati Narasimha, &c.	Do. do. ...	Do. ...	207	207 0 0
			Idagali ...	Dasari Papayya, N. Raghavulu, &c.	Do. do. ...	Do. ...	38	38 0 0
			Ravúr ...	Madiga Vaimaya, Narasimloo, &c.	Do. do. ...	Do. ...	57	57 0 0
			Vavveru ...	Velugu Ramudu, Bellamkonda Latchmigadu, &c.	Do. do. ...	Do. ...	29	29 0 0
			Marripad ...	Patu Subbayya, Makala Pairayya, &c.	Do. do. ...	Do. ...	50	50 0 0
			Iskapollem ...	Yaidukondla Chinnavadu, Ampaka Ramudu, &c.	Do. do. ...	Do. ...	36	36 0 0
	Dy. Collector.	Kávali ...	Venkanapollem.	Village Munsif ...	To repair tanks ...	Palmyra leaves...	400	0 6 5
	Collector.	Kávali ...	Rudrakota ...	Villagers of Rudrakota.	To rebuild their houses burnt.	Palmyra trees ...	62	62 0 0
			Mungamoor ...	Villagers of Mungamoor.	Do. do. ...	Do. ...	114	114 0 0
			Zammulapalem	Villagers of Zammulapalem.	Do. do. ...	Do. ...	36	36 0 0
			Maddurupad ...	Villagers of Maripad.	Do. do. ...	Do. ...	10	10 0 0
			Kávali ...	Villagers of Kávali	Do. do. ...	Do. ...	320	320 0 0
			Maddurupad ...					
			Rudrakota ...					
			Anamadugu ...					
			Tummalapenta.					
			Tallapalem ...			Palmyra leaves.	80,000	80 0 0
						Total ...	C. ft. 11,350 Mds. 4,020	1,215 6 5

Statement shewing free grants during the year 1889-90—*cont.*

District.	Authority under which granted.	Range.	Locality.	Name of grantee.	Purpose for which granted.	Produce granted. Description.	Number or quantity.	Value. Rs. A. P.
Cuddapah.	Collector...	Cuddapah.	Pulivendla ...	M. Veeriah ...	To rebuild his houses burnt.	Third-class timber trees.	8	1 0 0
						Bamboos ...	Cart-load ½	0 10 0
			Palampalle ...	Ryots of village ...	Do. do.	Third-class timber trees.	72	9 0 0
						Bamboos ...	Cart-loads 4½	5 10 0
			Kanuparthi ...	Do.	To rebuild their houses washed away by floods.	Third-class timber trees.	104	13 0 0
						Bamboos ...	Cart-loads 6½	8 2 0
			Mamillapalle ...	Cottappa of Yerramukapalli.	To rebuild their houses burnt.	Third-class timber trees.	10	1 4 0
						Total ...	Trees 194 or 400 C. ft. Bamboos No. 1,725.	38 10 0
Kurnool.	Collector	Sirvél ...	Reddipalle hamlet of Rudravaram.	Madasi Baligadu and 8 others.	To rebuild their houses burnt.	Third-class wood, rough.	Cart-loads 14	17 8 0
						Bamboos ...	Do. 9	11 4 0
		Pattikonda.	Kothapalle hamlet of Vappuvella Govindinne.	Dudikula Vannigadu and 6 others.	Do. ...	Third-class wood, rough.	Do. 13	16 4 0
						Bamboos ...	Do. 12	15 0 0
		Nandikótkur	Nandikótkur ...	Madiga Baligadu and Mala Kunti Nagadu.	Do. ...	Third-class wood, rough.	Do. 4	5 0 0
						Bamboos ...	Do. 3	3 12 0
	District Forest Officer.	Sirvél ...	Sirvél ...	Mahamma Saib and 4 others	Do. ...	Third-class wood, rough.	Do. 10	12 8 0
						Bamboos ...	Do. 5	6 4 0
		Nandyál ...	Ernapad ...	Maddichinna Venkatappa, Pedda Venkatappa, Maddi Thimma and 19 others.	Do. ...	Third-class wood, rough.	Do. 22	27 8 0
						Bamboos ..	Do. 22	27 8 0
		Pattikonda.	Konukuntla ...	Madiga Yerravadu and 2 others.	Do. ...	Third-class wood, rough.	Do. 3	3 12 0
						Total ...	C. ft. 1,320 No. 6,120	146 4 0
Bellary.	Rules under section 26 of the Forest Act.	Bellary and Sandúr.	Government waste lands in Koggalu, Asundi, Kamarachedu, Sandúr and Sankarabanda.	Rao Bahadur A. Sabhapathi Mudaliar of Bellary.	For using as manure for lands irrigated in the Hagri valley.	Tangedu leaves.	Mds. 1,800	320 0 0
						Total ...	Mds. 1,800	320 0 0
Anantapur.		*Nil.*						
Nílgiris.	Rules under section 26 of the Forest Act.	Melúr ...	Village Forests and mund sholas attached to the villages and munds concerned.	Todas and Badagas.	For kondam feast	Jungle-wood trees	Cart-loads. 1- 20 C. ft.	3 0 0
					For building houses.	Do. ...	3- 60 do.	9 0 0
					For building craals.	Do. ...	3- 60 do.	9 0 0
		Sigúr ...	Do. ...	Do. ...	Do. houses.	Do. ...	1- 20 do.	3 0 0
		Ootacamund	Do. ...	Do. ...	Do. houses.	Do. ...	17-340 do.	51 0 0
					Do. craals.	Do. ...	7-140 do.	21 0 0
					Do. funeral sheds.	Do. ...	12-240 do.	36 0 0
		Coonoor ...	Do. ...	Do. ...	Do. craals.	Do. ...	2- 40 do.	6 0 0
		All ranges...	Do. ...	Do. ...	For grazing Toda buffaloes.*	.....	.....	725 0 0
						Total ...	C. ft. 920	863 0 0
						Grand Total...	C.ft. 15,860 No. 13,989 Mds. 5,820	2,930 10 5

* 2,900 head.

APPENDIX E.

STATEMENT shewing the approximate area of waste land in which grazing is restricted in the districts of the Northern Circle.

District.	Taluk.	Total area of waste land.	Area under no restrictions as to grazing.	Area in which grazing is free, but in which goats and sheep are excluded.	Area in which fees are charged, but goats and sheep are not excluded.	Area in which fees are charged, but in which goats and sheep are excluded.	Remarks.
		SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	
Ganjam	Goomsur ..	849	849	..	..	..	
	Berhampore ..	206	206	..	..	..	
	Chicacole ..	99	99	..	..	..	
	Total ..	1,154	1,154	..	..	..	
Vizagapatam ..	Pálkonda ..	222	199	..	..	..	* Goats excluded.
	Golgonda ..	97	77	..	20*	..	Buffaloes, As. 4 per head per annum.
	Sarvasiddhi ..	54	40	..	..	14	Cows, bullock, As. 2 per head per annum.
	Total ..	373	316	..	20	14	Sheep, anna 1 per head per annum.
Godávari	Narsápur ..	117	101	..	..	16	Buffaloes, As. 4 per head per annum. Cows, bulls, &c., As. 2 per head per annum.
	Bhímavaram ..	60	60	..	..	..	
	Tanuku ..	40	33	..	..	..	
	Ellore ..	167	121	..	..	30	
	Yerṇagúdem ..	197	78	..	..	101	
	Rajahmundry ..	121	44	..	..	73	
	Peddápuram ..	221	69	..	..	142	
	Rámachandrapuram ..	40	40	..	..	..	
	Amalápuram ..	75	61	..	..	14	
	Bhadráchalam ..	696	180	516	..	..	
	Tuni ..	112	14	..	..	98	
	Cocanada ..	16	5	..	..	11	
	Total ..	1,862	806	516	..	485	
Kistna	Palnád ..	582	194	..	140	241	From Rs. 6-4-0 to Rs. 8 per 100 heads.
	Vinukonda ..	251	74	..	80	92	From Rs. 6-4-0 to Rs. 20 per 100 heads.
	Narsaraopet ..	139	93	2	8	13	From Rs. 5 to Rs. 8 per 100 heads.
	Sattenapalle ..	143	43	..	..	100	Rs. 10 per 100 heads.
	Nandigáma ..	108	65	..	12	15	From Rs. 6-4-0 to Rs. 25 per 100 heads.
	Bezváda ..	89	29	..	16	6	From Rs. 6-4-0 to Rs. 12-8-0 per 100 heads.
	Guntúr ..	86	73	2	..	8	Goats are allowed to graze free in unreserved forests only.
	Bápatla ..	242	224	..	..	18	
	Répalle ..	179	155	..	..	14	
	Bandar ..	292	250	42	..	..	
	Gudiváda ..	313	312	..	..	..	
	Total ..	2,424	1,512	46	256	507	
Nellore	Nellore ..	230	161	20	33	16	Per head, anna 1.
	Gúdúr ..	381	282	..	3	5	Rental system.
	Rápúr ..	302	159	..	..	143	
	Atmakúr ..	221	168	27	..	26	From pies 6 to anna 1 per head.
	Udayagiri ..	215	186	135	..	51	This is Village Shekada: goats and sheep graze here. No fees are separately charged.
	Kávali ..	50	46	29	16	6	From pies 6, pies 8 and anna 1 per head.
	Kanigiri ..	235	184	..	..	51	Only goats are excluded in the area under Col. 6; pies 6 in some villages and pies 3 in others per head.
	Kandukúr ..	190	151	19	..	20	Sheep and goats do not graze in areas under columns 4 and 5, but in that under column 3.
	Ongole ..	140	138	..	2	..	Rental system.
	Total ..	1,964	1,475	230	54	318	

Statement shewing the approximate area of waste land in which grazing is restricted in the districts of the Northern Circle—*cont.*

District.	Taluk.	Total area of waste land.	Area under no restrictions as to grazing.	Area in which grazing is free, but in which goats and sheep are excluded.	Area in which fees are charged, but goats and sheep are not excluded.	Area in which fees are charged, but in which goats and sheep are excluded.	Remarks.
		SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	
Cuddapah	Jammalamadugu	235	169	..	..	64	Full grazing fees are charged:— Buffaloes, As. 8 per head per annum. Bulls, cows, &c., As. 4 per head per annum.
	Proddutur ..	217	136	..	..	65	
	Badvél ..	536	298	..	..	220	
	Siddhavattam ..	513	206	..	..	267	
	Cuddapah ..	419	203	..	..	199	
	Pulivendla ..	361	272	47	..	42	
	Kadiri ..	754	541	115	..	90	
	Ráyachóti ..	717	472	12	..	201	
	Pullampét ..	721	414	14	..	283	
	Váyalpád ..	573	416	33	..	117	
	Madanapalle ..	561	467	30	..	26	
	Total ..	5,607	3,594	251	..	1,574	
Kurnool	Márkápur ..	684	354	..	330	..	Buffaloes, As. 4 per head per annum. Bulls and Cows, As. 2 per head per annum. Goats, anna 1 per head per annum. Sheep, pies 6 per head per annum.
	Cumbum ..	648	201	..	370	60	
	Sirvél ..	254	54	..	200	..	
	Nandyál ..	429	129	..	295	..	
	Nandikótkur ..	754	354	..	394	..	
	Rámallakót ..	219	216	..	..	..	
	Pattikonda ..	292	290	..	..	..	
	Koilkuntla ..	187	187	..	..	..	
	Total ..	3,467	1,785	..	1,589	60	
Bellary	Adóni ..	227	170	..	..	57	Buffaloes, As. 8 per head per annum. Bulls, cows, &c., As. 4 per head per annum.
	Alúr ..	141	137	..	..	4	
	Bellary ..	248	223	..	..	25	
	Ráyadrug ..	347	329	..	..	18	
	Hospet ..	307	249	..	..	58	
	Kúdligi ..	581	509	..	..	72	
	Harpanahalli ..	348	278	..	..	70	
	Hadagalli ..	213	198	..	..	15	
	Total ..	2,412	2,093	..	..	319	
Anantapur ..	Gooty ..	227	143	..	..	76	Buffaloes, As. 4 per head per annum. Cows, bulls, &c., As. 2 per head per annum. 1 Cart-load of grass cut, As. 5. 1 Head-load of grass cut, pies 3.
	Tadpatri ..	167	139	..	..	23	
	Penukonda ..	417	362	..	..	35	
	Anantapur ..	237	219	..	..	..	
	Dharmavaram.	607	559	..	..	37	
	Hindupur ..	236	193	..	..	35	
	Madakasíra ..	256	256	..	..	..	
	Total ..	2,147	1,871	..	..	206	
Nílgiris	Tódanád ..	112	112	..	..	..	
	Merkunád ..	16	16	..	..	..	
	Paranginád ..	29	29	..	..	..	
	Kundahnad ..	18	18	..	..	..	
	South-east Wynaad ..	52	52	..	..	..	
	Total ..	227	227	..	..	..	
	Grand Total ..	21,637	14,833	1,043	1,919	3,483	

Annual Form No. 59-A.

Forest Department, Madras, Northern Circle.

Area of Reserved Forests, 1889-90.

District.	Range.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Ganjam.	Chokapad...	Dimrijholi	5,486	8½	...	...	5,486	8½	.....	
	Pondakhol.	Bondagocha ...	4,400	7	...	...	4,400	7	.....	
	Bodoboro-singhi.	Malati	1,720	2½	...	...	1,720	2½	.....	
		Total ...	11,606	18	...	...	11,606	18		
Vizagapatam.	Sarvasiddhi.	Peddapalle	8,960	14	...	...	8,960	14	.....	
		Total ...	8,960	14	...	...	8,960	14		
Godávari.	Bhadrá-chalam.	Pulsamamidi ...	...	...	4,520	...	4,520	7	No. 7 of 23rd Dec. 1889.	
		Marigura	...	...	44,500	...	44,500	70	No. 20 of 20th Dec. 1889.	
		Mattapalli	...	...	9,500	...	9,500	15	No. 44 of 21st Jan. 1890.	
	Delta ...	Coringa	7,000	11	...	...	7,000	11	.....	
		Bendemurlanka ...	...	...	362	...	362	½	No. 31 of 21st Jan. 1890.	
		Narsápur	114	...	...	...	114	...	.....	
		Total ...	7,114	11	58,882	...	65,996	103½		
Kistna.	Bandar ...	Kara	21	...	...	...	21	...	.....	
		Vanadhuru	64	...	...	...	64	...	.....	
		Bomminampadu ...	26	...	...	...	26	...	.....	
		Vémavarampadu ...	16	...	...	...	16	...	.....	
		Allinagaram ...	125	...	...	...	125	...	.....	
	Bezváda	Gavuravaram ...	81	...	*3	...	84	...	.....	* Rectification of area. The block was re-notified—*vide* notification No. 314 of 24th Oct. 1889.
		Bezváda	...	...	300	...	300	½	No. 124 of 10th May 1889.	
		Gunadala	...	...	400	...	400	½	No. 378 of 2nd Dec. 1889.	
		Kondapalle extension	...	...	1,225	...	1,225	2	No. 52 of 21st Jan. 1890.	
	Guntúr ...	Nidamarru ...	...	...	383	...	383	½	No. 372 of 5th Dec. 1889. No. 43 of 21st Jan. 1890.	
		Karlapudi	...	...	994	...	994	1½	No. 63 of 28th Jan. 1890.	
	Krósúr ...	Konanki	3,600	6	...	...	3,600	6	.....	
		Bellamkonda ...	...	...	1,380	...	1,380	2	No. 71 of 4th Feb. 1890.	
	Palnád ...	Tummurukodu ...	24	...	...	...	24	...	.....	
		Gangalakunta ...	...	...	24,461	...	24,461	38	No. 15 of 20th Dec. 1889.	
	Bápatla ...	Lankavanidibba ...	4,480	7	...	...	4,480	7	.....	
		Kothapalem ...	3,840	6	...	...	3,840	6	.....	
		Dindi	...	...	600	...	600	1	No. 78 of 21st March 1889.	
		Adavuladivi ...	...	...	610	...	610	1	No. 345 of 26th Nov. 1889.	
		Bápatla I ...	...	...	245	...	245	½	No. 373 of 5th Dec. 1889.	
		Do. II ...	...	...	1,032	...	1,032	1½	No. 79 of 12th Feb. 1890.	
		Karlapalem I ...	...	...	105	...	105	...	No. 374 of 5th Dec. 1889.	
		Do. II ...	...	...	208	...	208	½	No. 48 of 21st Jan. 1890.	
		Vedullapalli ...	...	...	166	...	166	½	No. 45 do.	
		Total ...	12,277	19	32,109 *3	...	44,389	69		

Area of Reserved Forests, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Nellore.	Ongole	Kottapatam ...	147	...	...	...	147	...	.....	
		Kanuparti	520	1	...	...	520	1	.....	
	Kandukúr	Ramapatam ...	60	...	...	...	60	...	.....	
		Chagollu	...	...	1,010	...	1,010	1½	No. 361 of 26th Nov. 1889.	
		China Laterapi ...	...	...	1,548	...	1,548	2½	No. 19 of 20th Dec. 1889.	
		Ravur	...	...	2,187	...	2,187	3½	No. 51 of 21st Jan. 1890.	
	Kávalí ...	Tummalapenta ...	100	...	...	...	100	...	.....	
		Maddurpaud ...	2,012	3	...	...	2,012	3	.....	
		Zaladanki, East ...	...	...	600	...	600	1	No. 293 of 16th Oct. 1889.	
		Do. West ...	...	...	1,254	...	1,254	2	No. 377 of 2nd Dec. 1889.	
		Tummulapenta, South	...	...	392	...	392	½	No. 296 of 22nd Oct. 1889.	
		Dharmavaram ...	...	...	189	...	189	...	No. 336 of 18th Nov. 1889.	
		Zammalapalem ...	...	...	1,130	...	1,130	2	No. 346 of 26th Nov. 1889.	
		Rudrakota	...	...	2,100	...	2,100	3	No. 370 of 2nd Dec. 1889.	
		Gattupalli	...	...	838	...	838	1½	No. 371 do.	
		Gollapalem	...	...	960	...	960	1½	No. 380 of 17th Dec. 1889.	
		Tallapalem	...	...	848	...	848	1½	No. 9 of 20th Dec. 1889.	
		Manubolupad ...	...	...	1,192	...	1,192	2	No. 47 of 21st Jan. 1890.	
	Nellore ...	Iskapalle	23	...	...	...	23	...	.....	
		Kandamur	...	...	1,520	...	1,520	2	No. 333 of 18th Nov. 1889.	
		Kakutur	...	...	480	...	480	1	No. 335 do.	
		Dontali	...	...	1,280	...	1,280	2	No. 338 do.	
		Chemudugunta ...	...	...	320	...	320	½	No. 11 of 20th Dec. 1889.	
		Utukur-Varni Casuarina Plantation.	...	...	607	...	607	1	No. 62 of 28th Jan. 1890.	
		South Mopur ...	...	...	1,000	...	1,000	1½	No. 68 of 6th Feb. 1890.	
	Gúdúr ...	Dugarazpatnam ...	796	2	*404	...	1,200	2	.....	*Rectification of area.
		Kanupur, East ...	...	...	960	...	960	1½	No. 258 of 20th Aug. 1889.	
		Vendodu	...	...	818	...	818	1½	No. 262 of 28th Aug. 1889.	
		Idagali	...	...	480	...	480	1	No. 330 of 9th Nov. 1889.	
		Vodur	...	...	883	...	883	1½	No. 339 of 18th Nov. 1889.	
		Gúdúr	...	...	950	...	950	1½	No. 375 of 2nd Dec. 1889.	
		Tammenapatam Casuarina Plantation.	...	...	485	...	485	1	No. 376 do.	
		Cherukumadi ...	...	...	640	...	640	1	No. 18 of 20th Dec. 1889.	
		Vellipedu	...	...	720	...	720	1	No. 30 of 21st Jan. 1890.	
		Chillakur	...	...	460	...	460	1	No. 50 do.	
		Vinduru	...	...	300	...	300	½	No. 64 of 28th Jan. 1890.	
	Atmakúr	Telugurayapuram ...	...	...	763	...	763	1	No. 294 of 22nd Oct. 1889.	
		Srikolanu	...	...	1,521	...	1,521	2½	No. 322 of 5th Nov. 1889.	
		Chejerla	...	...	1,121	...	1,121	2	No. 49 of 21st Jan. 1890.	
	Rápúr ...	Turimerla	...	...	640	...	640	1	No. 363 of 26th Nov. 1889.	
		Total ...	3,658	6	30,196 *404	...	34,258	54½		

Area of Reserved Forests, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Cuddapah.	Kódúr ...	Kodúr Plantation ...	50	...	...	...	50	...	.....	
		Thanakonda ...	1,048	2	...	...	1,048	2	.....	
		Uparapalle	108	...	...	...	108	..	.....	
		Kodúr Hill	7,440	11½	...	...	7,440	11½	.....	
		Seshachellam ...	128,000	200	...	...	128,000	200	.....	
		Settikunta	8,960	14	...	...	8,960	14	.....	
	Rajampet	Salivendra	12,800	20	...	...	12,800	20	.....	
		Pullampet	426	½	...	...	426	½	.....	
		Reddipalle	1,284	2	...	...	1,284	2	.....	
		Vattalúr	2,880	4½	...	...	2,880	4½	.....	
	Sidhout	Kanamalapalle ...	4,435	7	...	...	4,435	7	.....	
		Malliamkonda ...	10,240	16	...	...	10,240	16	.....	
	Badvél	Kavalakuntla ...	9,920	15½	...	...	9,920	15½	.....	
		Ganugapenta ...	14,080	22	...	...	14,080	22	.....	
	Cuddapah...	Kamalapuram ...	485	1	...	...	485	1	.....	
	Ráyachóti	Sibbyála	3,500	5½	...	...	3,500	5½	.....	
		Tsundupalle ...	3,000	4½	...	...	3,000	4½	.....	
		Gadikota	12,462	19½	...	...	12,462	19½	.. ...	
	Váyalpád ..	Yellutla	2,840	4½	...	...	2,840	4½	.....	
	Madanapalle.	Kotammakonda ...	...	...	640	...	640	1	No. 231 of 30th July 1889.	
		Total ...	223,958	350	640	...	224,598	.351		
Bellary.	Bellary ...	Timmapuram ...	...	...	1,046	...	1,046	1½	No. 166 of 15th June 1889.	
	Kúdligi ...	Gollalingammanahalli.	...	...	1,000	...	1,000	1½	No. 10 of 20th Dec. 1889.	
		Total ...	...	...	2,046	...	2,046	3		
Anantapur.	Gooty ...	Khojjapalle ...	367	½	...	...	367	½	.....	
	Anantapur.	Anantapur ...	131	...	...	...	131	...	.....	
	Penukonda.	Narsampalle ...	1,280	2	...	...	1,280	2	.....	
		Kottakotá	5,120	8	...	...	5,120	8	.....	
	Hindupur ...	Somarajmalai ...	1,920	3	...	...	1,920	3	.....	
		Total ...	8,818	13½	...	...	8,818	13½		
Nilgiris.	Ootacamund.	Marliamund Plantation.	17	...	...	...	17	...	.....	
		Aramby	430	½	...	...	430	½	.....	
		Marliamund ...	194	...	...	...	194	...	.....	
		Cairn Hill	559	1	...	...	559	1	.....	
		Brooklands	177	½	...	...	177	½	.....	
		Lovedale	296	½	...	...	296	½	.....	
		Craigmore	299	½	...	...	299	½	.....	
		Doddabetta	991	1½	...	...	991	1½	.....	
		Snowdon	1,053	2	...	...	1,053	2	.....	
		Jakuntha	373	½	...	...	373	½	.....	
		Muthanád	420	1	...	...	420	1	.....	
		Governor's Shola ...	2,671	4½	...	...	2,671	4½	.....	
		Pykara	1,309	2	...	...	1,309	2	.....	
		Sandynullah ...	818	1	...	...	818	1	.....	
		Kengodu	451	½	...	...	451	½	.....	
		Karpakan	391	½	...	...	391	½	.....	
	Naduvatam.	Naduvatam Sholas...	1,501	2	...	...	1,501	2	.....	
		Vellingiri	643	1	...	...	643	1	.....	
		Kadcoopa	1,622	2½	...	...	1,622	2½	.....	
		Mukurti	8,953	14	...	...	8,953	14	.....	
		Northernhay ...	3,998	6	...	...	3,998	6	.....	
		Naduvatam ...	3,411	5½	...	...	3,411	5½	... ..	
		Gadsbrook ...	230	1	...	...	230	1	.....	
		Cherambadi ...	1,983	3	...	...	1,983	3	.....	
		Ammankaval ...	563	1	...	...	563	1	.....	
	Melúr ...	Kundahs	40,521	63	...	...	40,521	63	.....	
		Mikkeru	1,267	2	...	...	1,267	2	.....	
		Thia Shola	1,551	2½	...	...	1,551	2½	.....	
		Hiriyashige... ...	2,175	3½	...	...	2,175	3½	.....	
		Ithalar	460	1	...	...	460	1	.....	

Area of Reserved Forests, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Nílgiris —*cont.*	Melúr—*cont.*	Devashola	215	½	...	...	215	½	.....	
		Balakola	935	1½	...	...	935	1½	.....	
		Athigarahatti ...	34	...	...	...	34	...	.....	
		Sutton Shola ...	52	...	...	...	52	...	.....	
		Commandu	993	1½	...	...	993	1½	.....	
		Pembroke	122	...	...	...	122	...	.....	
	Coonoor	Hulikal	6,411	10	...	...	6,411	10	.....	
		Honnathalai ...	320	½	...	...	320	½	.....	
		Rallia	189	½	...	...	189	½	.....	
		Black Bridge ...	390	½	...	...	390	½	.....	
		Coonoor Peak ...	540	½	...	...	540	½	.....	
		Lamb's Rock ...	708	1	...	...	708	1	.....	
		Tiger Hill	328	½	...	...	328	½	.....	
		Ghát Reserve ...	311	½	...	...	311	½	.....	
		Hill Grove	187	½	...	...	187	½	.....	
		Kullar	1,815	3	...	...	1,815	3	.....	
	Kótagiri ...	Kótagiri	563	1	...	...	563	1	.....	
	Sigúr	Kalhatti slopes ...	8,983	14	...	...	8,983	14	.....	
		Ebanad	571	1	...	...	571	1	.....	
	Mudumalai.	Benné	11,068	17	...	...	11,068	17	.....	
		Moyar	13,580	21	...	...	13,580	21	.....	
		Total ...	127,642	199½	...	...	127,642	199½		
		Grand Total ...	404,033	631	123,873 * 407	...	528,313	826	.....	* Rectification of area.

Abstract.

District.	Area on 1st April 1889.	Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.
	SQ. MILES.	SQ. MILES.	SQ. MILES.	SQ. MILES.
Ganjam	18	...	...	18
Vizagapatam	14	...	...	14
Godávari	11	92½	...	103½
Kistna	19	50	...	69
Nellore	6	48½	...	54½
Cuddapah	350	1	...	351
Kurnool	...	...	...	...
Bellary	...	3	...	3
Anantapur	13½	...	...	13½
Nílgiris	199½	...	...	199½
Total ...	631	195	...	826

FORM No. 59-B.

Forest Department, Madras, Northern Circle.

Area of Forests Reserved under previous orders, 1889-90.

District.	Range.	Name of Forest.	AREA ON 1ST APRIL 1889.		ADDED DURING THE YEAR.	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 31ST MARCH 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Cuddapah.	Ráyachóti ...	Mudampad	...	...	3,200	...	3,200	5		
	Proddatur.	Rameswaram ...	...	...	91		91			The rest of the areas given under Form 59-B in the annual report for 1887-88 are all included now (though sometimes under different names) either in Form 59-A or 59-C.
		Thullamapuram ...	...	...	153		153			
		Vellala	...	...	258		258			
		Alladapalle	...	...	197		197			
		Paydala	...	...	99	...	99	2	.....	
		Kottapalli	...	...	120		120			
		Modumidapalle ...	...	...	86		86			
		Anantapuram ...	...	...	138		138			
		Kallur	...	...	160		160			
	Kadiri ..	Malakavemla ...	...	...	3,580	...	3,580	5½		
		Total ...	...	...	8,082	...	8,082	12½		

ANNUAL FORM No. 59-C.

Forest Department, Madras, Northern Circle.

Area of Reserved Lands, 1889-90.

District.	Range.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Ganjam.	Bodoborosinghi.	Kaliamba ... S	5,200	8	...	...	5,200	8		
		Teleki ... S	15,200	24	...	...	15,200	24		
		Baibali	21,920	34	...	...	21,920	34		
		Vinjagheri S	6,000	9	...	...	6,000	9		
		Rogoda	16,000	25	...	...	16,000	25		
	Chokapad ...	Darpangia ...	16,160	25	...	...	16,160	25		
		Rambha	9,300	15	...	...	9,300	15		
		Gullery	23,860	37	...	...	23,860	37		
		Koolada ... S	2,760	4	...	...	2,760	4		
	Gayagonda ...	Ambazara S	32,000	50	...	...	32,000	50		
		Chodiapalli S	960	2	...	...	960	2		
		Chondorgiri S	18,320	29	...	...	18,320	29		
		Gundribadi S	12,200	19	...	...	12,200	19		
		Gogodo ... S	15,240	24	...	...	15,240	24	Notfn. No. 199 of 13th Oct. 1884.	
	Jaganathprasad.	Paichalia ... S	13,760	22	...	...	13,760	22		
		Brahmanosai S	8,080	13	...	...	8,080	13		
		Jaganathprasad S	26,200	41	...	...	26,200	41		
	Buguda ...	Panchabuthi S	4,320	6	...	...	4,320	6		
		Kurcholi	5,520	8	...	...	5,520	8		
		Kriyamba	23,320	36	...	...	23,320	36		
		Sandusalya S	2,000	3	...	...	2,000	3		
		Bodochendana S	800	1	...	...	800	1		
		Vishnuchakram S	4,860	8	...	...	4,860	8		
	Pondokol ...	Dhougam	2,400	4	...	...	2,400	4		
		Pipalapanka ...	7,700	12	...	...	7,700	12		
		Moondapitta S	6,880	11	...	...	6,880	11		
		Hukuma	4,160	7	...	...	4,160	7		
		Rayigoda ... S	6,700	11	...	...	6,700	11		
		Dabuki ... S	1,450	2	...	...	1,450	2	Notfn. No. 54 of 26th Feb. 1889.	
	Berhampore...	Ramagodo ...	6,620	10	...	...	6,620	10	Notfn. No. 311 of 2nd Nov. 1885.	
		Bainamari ...	3,750	5½	...	...	3,750	5½		
		South Mohiri ...	3,730	5½	...	...	3,730	5½		
		Bollibogoda ...	261	1	...	...	261	1		
		Balakristnapuram.	164	...	...	...	164	...		
		Chatrapur ...	695	1	...	...	695	1		
		Dura	279	1	...	...	279	1		
		Golabondo ...	379				379			
		Podhora	760	1	...	...	760	1		
		Mushidipolem ...	238	...	...	...	238	...		
		Kusimi	625	1	...	...	625	1		
		Bendaliya	163	...	...	...	163	...		
		Mohoda	419	1	...	...	419	1	Fuel and Fodder. Reserves. Bd.'s Procs. No. F. 285 of 20th May 1887.	
		Mushiyakalli ...	522	1	...	...	522	1		
		Ankusapuram ...	138	...	...	...	138	...		
		Mohughora ...	1,697	2	...	...	1,697	2		
		Maharlapalli ...	924	2	...	...	924	2		
		Virakrishnachandrapuram.	445	1	...	...	445	1		
		Godohill	225	...	...	...	225	...		
		Joronohill ...	1,002	2	...	...	1,002	2		
		West Batukamarada.	179	...	...	...	179	...		
		Nimmapuram ...	697	1	...	...	697	1		
		Sikharapuram ...	260	1	...	...	260	1		
		Shapuram	142	...	...	...	142	...		
		Total ...	337,584	527	...	...	337,584	527		
Vizagapatam.	Golgonda ...	Arlova	...	...	1,500	...	1,500	2½	Notfn. No. 316 of 22nd Oct. 1889.	
		Pedimkonda ...	...	...	1,000	...	1,000	1½		
		Kakurlakonda ...	...	...	1,500	...	1,500	2½		
		Yenkatapuram ...	...	...	1,500	...	1,500	2½		
		Kodavalipudi ...	...	...	1,000	...	1,000	1½		
		Total ...	...	...	6,500	...	6,500	10½		

'S' denotes that the settlement is completed.

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Godávari.		Ragoovapatnam ...	12,160	19	...	...	12,160	19		
		Sullanka	17,920	28	...	...	17,920	28	Notfn. No. 448 of 23rd Nov. 1886.	
		Anantavaram ...	8,320	13	...	...	8,320	13		
		Totapalle	3,520	5	...	...	3,520	5		
		Oligogola	20,800	32	...	...	20,800	32		
		Ramasaram ...	2,500	4	...	...	2,500	4	Notfn. No. 213 of 23rd May 1887.	
		Murari ... S	2,000	3	...	* 1,300	700	1	Notfn. No. 134 of 9th May 1888.	
		Kovida	2,100	3½	...	...	2,100	3½		
		Banadapalli ...	...	...	6,800	...	6,800	10½		
	Peddápuram ...	Lododdi	...	...	8,400	...	8,400	13		
		Vatangi	...	...	11,000	...	11,000	17		
		Aminbada ...	...	...	5,600	...	5,600	9		
		Anantagiri ...	...	...	3,900	...	3,900	6		
		Laburti	...	...	8,100	...	8,100	12½	Notfn. No. 281 of 1st Oct. 1889.	
		Doramamidi ...	...	...	7,200	...	7,200	11		
		Verabhadram ...	...	...	11,200	...	11,200	17½		
		Jeddangi	...	...	6,700	...	6,700	10½		
		Annavaram ...	...	...	10,500	...	10,500	16½		
		Peddagurangi ...	...	...	5,800	...	5,800	9		
		Lingamparti ...	...	...	7,600	...	7,600	12		
		Devancheruvu S	5,000	8	...	...	5,000	8	Notfn. No. 308 of 26th July 1886.	
		Lakkonda ...	...	...	13,000	...	13,000	20½		
	Rajahmundry.	Molleru	...	...	10,000	...	10,000	16	Notfn. No. 282 of 1st Oct. 1889.	
		Sudikonda ...	...	...	5,300	...	5,300	8		
		Mallavaram ...	...	...	6,500	...	6,500	10		
		Tirumaliapalem ...	...	...	9,200	...	9,200	15		
		Mulkanapalli S	5,300	8	...	* 1,642	3,658	5½		
		Dumagudiem S	9,200	15	...	* 3,090	6,110	9½		
		Arlaguram S	7,000	11	...	* 864	6,136	9½		
		Tunikicheruvu S	13,800	22	...	* 2,940	10,860	17		
		Bhadráchalam S	12,700	20	...	* 4,678	8,022	12½		
		Gogubaka ... S	2,000	3	...	* 334	1,666	2½		
		Komanpalli S	4,400	7	...	* 1,150	3,250	5		
		Bandreo ... S	10,900	17	...	...	10,900	17		
		Golaguppa S	8,500	13	...	* 500	8,000	12½		
		Narakonda S	7,500	12	...	...	7,500	12		
		Pengha ... S	4,600	7	...	* 200	4,400	7	Notfn. No. 18 of 19th Dec. 1885.	
		Upanapalli S	3,300	5	...	...	3,300	5		
		Tatlunka ... S	12,600	20	...	* 600	12,000	19		
		Ramchandram S	10,300	16	...	...	10,300	16		
	Bhadráchalam.	Rapak ... S	8,000	12	...	* 1,000	7,000	11		
		Sitarampuram S	3,000	5	...	...	3,000	5		
		Bhandargudem S	7,100	11	...	...	7,100	11		
		Burkankota S	1,500	2	...	...	1,500	2		
		Kaler ... S	6,500	10	...	...	6,500	10		
		Nialakota ... S	2,700	4	...	* 200	2,500	4		
		Lakewaram S	7,200	11	...	* 700	6,500	10		
		Kanslur ... S	7,000	11	...	* 800	6,200	10		
		Mattapalli S	13,000	20	...	† 9,500 * 3,500	...	...		
		Pulsmamidi S	6,800	11	...	† 4,520 * 2,280	...	...		
		Walsugri	8,700	14	...	...	8,700	14	Notfn. No. 18 of 19th Dec. 1885.	
		Rekapalle hills ...	107,700	168	...	...	107,700	168		
		Marigura ... S	45,500	71	...	† 44,500 * 1,000	...	...		
		Velagalapalle S	2,560	4	...	* 360	2,200	3½		
		Chintalapudi S	2,560	4	...	* 1,460	1,100	1½		
		Barrikonda S	3,840	6	...	* 340	3,500	5½	Notfn. No. 210 of 23rd May 1887.	
		Erraguntapalle S	9,600	15	...	* 960	8,640	13½		
	Ellore ...	Bandamcherla S	6,400	10	...	* 1,200	5,200	8		
		Tadikalapudi S	2,560	4	...	* 60	2,500	4		
		Ramasingavaram S	1,920	3	...	...	1,920	3		
		Ungutur	...	...	4,500	...	4,500	7	Notfn. No. 145 of 21st May 1889.	
		Upputer	10,000	15½	...	...	10,000	15½	Notfn. No. 291 of 29th July 1887.	
	Delta ...	Bendemurlanka S	371	1	...	† 362 * 9	...	...		
		Kandikuppa ...	...	...	9,000	...	9,000	14	Notfn. No. 288 of 11th Oct. 1889.	
		Jilugumilli ...	...	...	3,300	...	3,300	5	Notfn. No. 285 of 1st Oct. 1889.	
	Yernagúdem...	Darbhagudem ...	...	...	2,200	...	2,200	3½		
		Barrinkalapadu ...	...	...	1,600	...	1,600	2½		
		Thaduvai ...	...	...	1,900	...	1,900	3		

* Rectification of area. † Transferred to Form 59-A.

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.		Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Godávari—*cont.*	Yernagúdem—*cont.*	Marlagudem ...		...	...	2,700	...	2,700	4	Notfn. No. 285 of 1st Oct. 1889.	
		Beddadavole ...		...	...	15,000	...	15,000	23½		
		Rajahmundram ...		...	...	400	...	400	½		
		Nallacherla ...		...	...	11,000	...	11,000	17		
		Kopilli		...	...	19,000	...	19,000	30		
		Kovada		...	...	19,000	...	19,000	30		
		Total ...		450,931	704	226,400	*31,167 †58,882	587,282	917		
Kistna.	Bezváda ...	Kondapalle	‡S	35,222	54½	...	†1,225	33,997	52½	Notfn. No. 143 of 30th July 1884.	
		Kothur		7,593	12	...	..	7,593	12		
		Bezváda ...	S	300	½	...	†300	...	...		
		Gunadhala	S	400	½	...	†400	...	...		
		Budavada ...	S	4,650	7½	...	...	4,650	7½	Notfn. No. 143 of 30th July 1884.	
		Jaggayapeta	S	4,650	7½	...	...	4,650	7½		
		Kondúr ...	S	3,000	5	...	...	3,000	5	Notfn. No. 351 of 11th Oct. 1887.	
	Guntúr ...	Kondavíd ...	S	13,156	20½	...	...	13,156	20½	Notfn. No. 143 of 30th July 1884.	
		Tadepalle ...	S	2,300	3½	...	...	2,300	3½		
		Kuragallu ...	S	1,290	2	...	...	1,290	2		
		Nidamarru	S	581	1	...	†383 *198	...	...		
		Narakodúr	S	811	1	...	*296	515	1	Notfn. No. 143 of 30th July 1884.	
		Karlapudi ...	S	559	1	*435	†994	...	...		
		Kolakalúr		...	...	1,403	...	1,403	2	Notfn. No. 32 of 11th Jan. 1890.	
	Krosúr ...	Venkatayyapalem.	‡S	46,201	72	3,000	...	49,201	77	Notfn. No. 143 of 30th July 1884 and Notfn. No. 317 of 29th Oct. 1889.	
		Bellamkonda	S	1,675	2½	...	†1,380 *295	...	...		
		Nevalipur... ...		11,870	19	...	...	11,870	19	Notfn. No. 143 of 30th July 1884.	
	Vinukonda ...	Bollapalli ...	‡S	37,712	59	12,000	...	49,712	78	Notfn. No. 317 of 29th Oct. 1889.	
		Guttikonda ...		42,241	66	...	...	42,241	66	Notfn. No. 143 of 30th July 1884.	
		Kakirala ...	S	28,864	45	...	...	28,864	45		
	Palnád ...	Madinapadu	S	9,600	15	...	...	9,600	15		
		Pasvemula ...		22,782	36	...	...	22,782	36		
		Kandlagunta ...		34,947	55	...	...	34,947	55		
		Gangalakunta	S	24,514	38	...	†24,461 *53	...	...		
		Mutukur ...	S	31,418	49	...	§10	31,408	49	Notfn. No. 143 of 30th July 1884.	
	Bápatla ...	Muthayyapalem	S	9,842	15	...	*273	9,569	14½		
		Pandhillapalli	S	162	...	...	...	162	..	Notfn. No. 38 of 26th Jan. 1885.	
		Wardarevu	S	82	...	...	...	82	...		
		Nayanapalli	S	156	...	...	...	156	...		
		Bápatla, No. I	S	247	1	...	†245 *2	...	...		
		Do. „ II	S	840	1	*192	†1,032	...	...		
		Karlapalem, No. I.	S	107	...	...	†105 *2	...	...		
		Do. „ II.	S	218	1	...	†208 *10	...	...		
		Vedhullapalle	S	166	...	...	†166	...	...		
		Kottapalem, No. II.	S	3,100	5	...	...	3,100	5	Notfn. No. 350 of 11th Oct. 1887.	
		Adavuladivi	S	610	1	...	†610	...	...		
		Dindi ...	S	600	1	...	†600	...	...		
	Bandar ...	Yellichettidibba	S	4,640	7½	...	...	4,640	7½	Notfn. No. 91 of 8th Feb. 1887.	
		Nachugunta	S	8,640	14	...	...	8,640	14		
		Sorlagundi	S	2,880	4	...	...	2,880	4		
		Gollapalem	S	390	½	...	...	390	½	Notfn. No. 38 of 26th Jan. 1885.	
		Kodúr ...	S	38	...	...	...	38	...		
		Palakayatippa	S	2,880	4	...	...	2,880	4	Notfn. No. 91 of 8th Feb. 1887.	
		Bandar Fort	S	7,500	12	...	...	7,500	12		
		Kanukollu	S	667	1	..	...	667	1	Notfn. No. 38 of 26th Jan. 1885.	
		Total ...		410,101	641	17,030	*1,139 †32,109	393,883	616		

* Rectification of area. † Transferred to Form 59-A. ‡ Part only settled.
§ Struck off. Notification No. 227 of 22nd July 1889.

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Nellore.	Ongole ...	Chimakurthi ...	7,500	12	...	...	7,500	12	Notfn. No. 185 of 13th Oct. 1883.	
		Ongole ... S	200	...	...	...	200	...	Notfn. No. 205 of 23rd Nov, 1883.	
	Kandukúr ...	Chagollu ... S	1,150	2	...	† 1,010 * 140	...	...		
		Buddepudi S	640	1	...	* 140	500	1	Notfn. No. 96 of 15th Feb. 1887.	
		Chakicherla S	320	½	* 3	...	323	½		
		Ramapatam S	1,280	2	236	...	1,516	2½		
		Ravúr ... S	1,520	2	* 667	† 2,187	...	...		
		Mocherla, Chalamcherla. S	12,290	19	...	...	12,290	19	Notfn. No. 96 of 15th Feb. 1887.	
		China Laterapi S	1,000	1½	* 548	† 1,548	...	...		
		Gudlúr ... S	2,800	4½	* 632	...	3,432	5½	Notfn. No. 96 of 15th Feb. 1887.	
		Kávali	2,933	5	...	...	2,933	5	Board's Procs., No. 3216 / F. 647 of 24th Nov. 1885.	
	Kávali ...	Kávali ... S	1,610	2½	390	...	2,000	3	Notfn. No. 97 of 15th Feb. 1887.	
		Rudrakota S	1,800	3	* 300	† 2,100	...	...		
		Narayanapuram S	1,600	3	* 792	...	2,392	4	Notfn. No. 97 of 15th Feb. 1887.	
		Zammalapalem S	1,280	2	...	† 1,130 * 150	...	...		
		Zaladauki ... S	900	1½	* 954	† 1,854	...	...		
		Gattupalli ... S	960	1½	...	† 838 * 122	...	...		
		Kesavaram S	1,800	3	...	* 892	908	1½	Notfn. No. 97 of 15th Feb. 1887.	
		Chira Annalúr S	2,000	3	* 1,400	...	3,400	5		
		Tummalapenta ‡ S	4,240	7	...	† 392 * 288	3,560	5½		
		Gollapalem S	960	1½	...	† 960	...	...		
		Tallapalem S	960	1½	...	† 848 * 112	...	...		
		Bitragunta S	3,400	5	...	* 1,492	1,908	3	Notfn. No. 97 of 15th Feb. 1887.	
		Nagalavaram S	960	1½	...	* 546	414	½		
		Zakkepalle-Gudúr S	800	1	...	...	800	1		
		Chamadala S	850	1½	...	* 100	750	1		
		Manubolupad S	1,120	2	* 72	† 1,192	...	...		
		Dundigam S	500	1	* 15	...	515	1	Notfn. No. 97 of 15th Feb. 1887.	
		Dharmavaram S	200	½	...	† 189 * 11	...	...		
		Mungamore ...	94	..	...	...	94	...	Board's Procs., No. F. 371 of 1st July 1887.	
		Kadanutla ...	289	½	...	...	289	½		
		Talapalem ...	761	1	...	...	761	1		
		Kávali	1,511	2	...	...	1,511	2		
		Kolladinne ...	561	1	...	...	561	1		
		Musunúr	1,014	1½	...	...	1,014	1½		
		Anamadugu ...	941	1½	...	...	941	1½		
		Chennayyapolliem.	1,161	2	...	...	1,161	2		
		Tummalapenta ...	2,476	4	...	...	2,476	4		
		Rudrakota ...	343	½	...	...	343	½		
	Kanigiri ...	Kanigiri	1,500	2	...	...	1,500	2	Notfn. No. 205 of 23rd Nov. 1883.	
		Nandavanam ...	17,000	27	* 1,000	...	18,000	28	Notfn. No. 190 of 6th July 1885.	
		Vedullacheruvu ...	8,000	13	* 1,000	...	9,000	14		
		Udayagiri-Durgam.	7,000	11	* 6,440	...	13,440	21	Notfn. No. 185 of 13th Oct. 1883.	
	Udayagiri ...	Yerrakondas ...	2,500	4	* 11,580	...	14,080	22	Notfn. No. 238 of 22nd Aug. 1885.	
		Udayagiri (East) and Appasamudram.	1,000	2	...	...	1,000	2	Notfn. No. 243 of 1st July 1887.	
	Atmakúr and Udayagiri.	Udayagiri Veligondas.	23,000	36	* 37,140	...	60,140	94	Notfn. No. 164 of 10th June 1885.	
		Bommavaram S	1,500	2	* 1,500	...	3,000	4½	Notfn. No. 247 of 1st July 1887.	
	Atmakúr ...	Telugurayapuram. S	800	1	...	† 763 * 37	...	...		
		Turpukambhampadu. S	960	1½	...	* 99	861	1½	Notfn. No. 101 of 15th Feb. 1887.	
		Chejerla ... S	1,120	2	* 1	† 1,121	...	...		
		Srikolanu S	1,040	2	* 481	† 1,521	...	...		
	Atmakúr and Nellore.	Prabhagiripatnam S	1,000	2	* 1,500	...	2,500	4	Notfn. No. 247 of 1st July 1887.	
	Nellore ...	Uttukur-Varni C.P. S	472	½	* 135	† 607	...	...		

* Rectification of area. † Transferred to Form 59-A. ‡ Part only settled.

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Nellore—*cont.*	Nellore—*cont.*	Marripad ... S	1,760	3	...	*360	1,400	2	Notfn. No. 99 of 15th Feb. 1887.	
		Turimerla ... S	640	1	...	*20	620	1		
		Dagadarti ... S	3,200	5	...	*334	2,866	4½		
		Kottapalli ... S	4,480	7	...	*250	4,230	6½		
		Vavveru ... S	4,160	6½	...	*1,190	2,970	4½		
		Amancherla S	1,440	2	...	...	1,440	2		
		Dontali ... S	1,280	2	...	†1,280	...	...		
		Chemudugunta S	320	½	...	†320	...	...		
		Kakutur ... S	480	½	...	†480	...	...		
		Nellore	2,560	4	...	...	2,560	4	Notfn. No. 99 of 15th Feb. 1887	
		Kondlapudi ..	1,440	2	...	...	1,440	2		
		Kandamúr S	1,520	2½	...	†1,520	...	...		
		South Mopúr S	1,000	1½	...	†1,000	...	...		
		Allipuram ... S	200	...	...	*80	120	...	Notfn. No. 250 of 1st July 1887.	
		Striharikota and its outliers.	35,710	56	...	...	35,710	56	Notfn. No. 185 of 13th Oct. 1883.	
		Kottapatam Plantation.	385	1	...	...	385	1	Notfn. No. 205 of 23rd Nov. 1883.	
		Tamminapatnam Plantation. S	485	1	...	†485	...	...		
		Yellasari	2,080	3	...	...	2,080	3	Notfn. No. 98 of 15th Feb. 1887.	
		Vellipedu ... S	720	1	...	†720	...	...		
		Ipuru ... S	450	1	*583	...	1,033	2	Notfn. No. 98 of 15th Feb. 1887.	
		Tamminapatnam, W. S	800	1	...	...	800	1		
		Momidi	2,040	3	...	...	2,040	3		
		Ankulapatur S	310	½	...	*76	240	½		
		Pidatalapudi S	800	1	...	*50	750	1		
		Kadivéd ... S	880	1	*38	...	918	1½		
	Gúdúr ...	Vódúr ... S	720	1	*163	†883	...	...		
		Nellaballi ... S	320	½	...	*45	275	½	Notfn. No. 98 of 15th Feb. 1887.	
		Chillakúr ... S	480	½	...	†460 *20	...	...		
		Gúdúr ... S	2,400	4	...	†950 *1,450	...	...		
		Vendodu ... S	700	1	*118	†818	...	...		
		Vedicherla ...	700	1	...	...	700	1	Notfn. No. 98 of 15th Feb. 1887.	
		Vindur ... S	300	½	...	†300	...	...		
		Madamanúr S	400	½	*160	...	560	1	Notfn. No. 98 of 15th Feb. 1887.	
		Idagali ... S	480	1	...	†480	...	...		
		Sarvepalli ... S	2,880	4½	...	*130	2,750	4	Notfn. No. 98 of 15th Feb. 1887.	
		Kanupur ... S	3,200	5	...	†960 *266	1,974	3		
		Cherukumudi S	640	1	...	†640	...	...		
		Kottapatam ...	2,500	4	...	...	2,500	4	Notfn. No. 98 of 15th Feb. 1887.	
	Rápúr ...	Turpupundla S	960	1½	*40	...	1,000	1½	Notfn. No. 100 of 15th Feb. 1887.	
		Sydapuram ...	2,080	3	...	...	2,080	3		
		Chaganam S	2,720	4	...	*1,220	1,500	2		
		Utukur ... S	640	1	*85	...	725	1		
		Turimerla S	640	1	...	†640	...	...		
		Tummalatalpur S	3,680	6	*320	...	4,000	6½	Notfn. No. 100 of 15th Feb. 1887.	
		Marlapudi ...	4,480	7	...	...	4,480	7		
		Pategunta ...	1,600	2½	...	...	1,600	2½		
		Paluru	400	1	...	...	400	1		
		Chikavolu S	1,120	2	...	*20	1,100	2		
		Cherlopalli ...	3,360	5	...	...	3,360	5		
		Potukonda ...	2,240	3½	...	...	2,240	3½		
		Guttikonda ...	160	...	...	...	160	...		
		Marellakonda ...	520	1	...	...	520	1		
		Veminabhi ...	2,080	3	...	...	2,080	3		
		Nellapalli S	1,840	3	*260	...	2,100	3		
		Kakerlakonda ...	3,680	6	...	...	3,680	6		
		Yerragondas ...	17,000	26½	*2,000	...	19,000	29½		
		Vavintaparti S	1,280	2	*20	...	1,300	2		
		Kummaragunta ...	480	1	...	...	480	1		
		Pulikollu ... S	640	1	*100	...	740	1		
		Mogallur ... S	720	1	*237	...	957	1½		
		Duggunta ... S	960	1½	*240	...	1,200	2		
		Podalakur ...	1,920	3	...	...	1,920	3		

* Rectification of area. † Transferred to Form 59-A.

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Nellore—*cont.*	Rápúr—*cont.*	Birdavolu ... S	2,400	4	...	...	2,400	4	Notfn. No. 100 of 15th Feb. 1887.	
		Vadlapudi	2,400	4	...	...	2,400	4		
		Marupur ... S	3,680	6	...	* 550	3,130	5		
		Toderu ... S	800	1	...	* 50	750	1		
		Nernúr	2,400	4	...	...	2,400	4		
		Chittaluru S	480	1	* 35	...	515	1		
		Ayyagaripalem S	320	½	...	...	320	½		
		Griddalúr	500	1	...	...	500	1	Notfn. No. 506 of 5th July 1887.	
	Rápúr and Atmakúr.	Rápúr Veligondas S	27,000	42	* 3,720	...	30,720	48	Notfn. No. 164 of 10th June 1885.	
		Total ...	313,656	493	74,905	* 10,234 † 30,196	348,131	543½		
Cuddapah.	Kódúr ...	Settikunta ...	960	1½	...	...	960	1½	Collr.'s notice of 7th March 1885.	Left reserved land after settlement.
		Cheyavaram S	4,480	7	...	...	4,480	7	Notfn. No. 304 of 24th July 1886.	
		Kódúr	2,160	3½	...	...	2,160	3½	Collr.'s notice of 7th March 1885.	Do.
		Gotimanikona S	3,840	6	...	...	3,840	6	Notfn. No. 304 of 24th July 1886.	
		Yerraguntlakota ...	6,400	10	...	* 4,480	1,920	3	Collr.'s notice of 7th March 1885.	
		Avalapenta S	960	1½	...	...	960	1½	Notfn. No. 304 of 24th July 1886.	
		Mushtiyeru S	4,480	7	...	...	4,480	7		
		Tippayapalli S	960	2	...	...	960	2		
		Kodivengamabavi ...	2,400	4	...	...	2,400	4		
		Marriutla ... S	6,400	10	...	...	6,400	10		
		Reddipalle Plantation.	...	...	516	...	516	1	...	Left reserved land after settlement. Omitted in 1887-88 report.
	Kódúr and Rájampet.	Seshachellam and Rollamadugu.	3,840	6	...	...	3,840	6	Collr.'s notice of 6th March 1884.	Left reserved land after settlement.
		Salivendru	...	...	6,400	...	6,400	10	...	Left reserved land after settlement. Omitted in 1887-88 report.
	Rájampet ...	Chitvel ... S	10,240	16	...	...	10,240	16	Collr.'s notice of 6th March 1884.	
		Ananthasamudram .	10,240	16	...	* 3,840	6,400	10	Collr.'s notice of 7th March 1885.	
		Sanipaya ghat ...	3,200	5	...	* 640	2,560	4		
		Badugantapalle S	3,520	5½	...	...	3,520	5½	Notfn. No. 304 of 24th July 1886.	
		Vattalúr Hill ...	...	...	320	...	320	½	...	Do.
	Rájampet and Ráyachóti.	Gadikota	3,538	6	...	...	3,538	6	Collr.'s notice of 6th March 1884.	Left reserved land after settlement.
		Yerrakonda S	8,320	13	...	...	8,320	13	Notfn. No. 304 of 24th July 1886.	
		Sibbyala	...	...	340	...	340	½	...	Left reserved land after settlement. Omitted in in 1887-88 report.
		Tsundupalle ...	...	...	1,480	...	1,480	2½		
	Sidhout, Rájampet and Ráyachóti.	Cheyer ... S	11,360	18	...	...	11,360	18	Notfn. No. 304 of 24th July 1886.	
	Rájampet and Sidhout.	Kanakalakonda S	6,400	10	...	...	6,400	10	Notfn. No. 54 of 14th March 1884.	
		Patur ... S	7,680	12	...	...	7,680	12		
		Kokaletikanama S	14,420	22½	...	...	14,420	22½	Notfn. No. 304 of 24th July 1886.	
		Kothur ... S	22,720	35½	...	...	22,720	35½		

* Rectification of area. † Transferred to Form 59-A.

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Cuddapah—*cont.*	Sidhout ...	Malliamkonda ...	...	...	3,840	...	3,840	6	Collr.'s notice of 6th Dec. 1884.	Left reserved land after settlement. Omitted in 1887-88 report.
		Do. addition. S	1,280	2	...	...	1,280	2	Notfn. No. 306 of 24th July 1886.	
		Vontimitta ...	...	...	5,760	...	5,760	9	Notfn. No. 54 of 14th March 1884.	Wrongly shown as abandoned in 1887-88.
		Konarazupalle S	9,600	15	...	...	9,600	15	Do.	
		Turupukonda S	30,080	47	...	...	30,080	47	Notfn. No. 306 of 24th July 1886.	
		Ippakanama ...	1,600	2½	...	...	1,600	2½	Collr.'s notice of 7th March 1885.	
	Badvél and Sidhout.	Ramapuram S	7,680	12	...	...	7,680	12	Notfn. No. 54 of 14th March 1884.	
	Badvél ...	Kavalakuntla ...	1,600	2½	...	...	1,600	2½	...	Left reserved land after settlement.
		Gopavaram S	13,440	21	...	...	13,440	21	Do.	
		Kottakota ... S	38,400	60	...	...	38,400	60		
		Kalasapad ... S	6,400	10	...	...	6,400	10	Notfn. No. 306 of 24th July 1886.	
		Sancherla ... S	5,760	9	...	...	5,760	9		
		Tsallagirigulla ...	1,280	2	...	...	1,280	2	Collr.'s notice of 17th March 1885	
		Badvél	1,920	3	...	...	1,920	3		
		Ganugapenta ...	...	...	3,200	...	3,200	5	...	Left reserved land after settlement. Omitted in 1887-88 report.
	Cuddapah, Badvél and Sidhout.	Lankamalai S	112,640	176	...	...	112,640	176	Notfn No. 54 of 14th March 1884.	
	Cuddapah and Sidhout.	Kanamalapalle ...	5,255	8	...	...	5,255	8	...	Left reserved land after settlement.
	Badvél and Proddutur.	Dasaripalle S	66,560	104	...	...	66,560	104	Notfn. No. 54 of 14th March 1884.	
	Cuddapah ...	Kanchelamoram S	8,960	14	...	...	8,960	14		
		Ganganapalle S	57,600	90	...	...	57,600	90	Collr.'s notice of 3rd March 1885.	Of this 32 sq. miles are proposed Reserved Forest.
		Chelakampalle ...	9,600	15	...	* 3,200	6,400	10		
		Kommaddi S	1,600	2½	...	...	1,600	2½	Notfn. No. 304 of 24th July 1886.	
		Tummalur S	3,200	5	...	...	3,200	5		
		Gonamakalapalle S	1,280	2	...	...	1,280	2		
	Proddutur and Pulivendla.	Bhanakotamala S	13,600	20	...	...	13,600	20		
		Mallela ... S	5,120	8	...	...	5,120	8		
	Proddutur ...	Kondasankesula S	4,480	7	...	...	4,480	7		
		Dabbudapalle S	3,280	5	...	...	3,280	5		
		Dhodiyam ... S	2,720	4	...	...	2,720	4		
		Malamidikamba-ladinne. S	3,440	5	...	...	3,440	5		
		Penner ... S	640	1	...	...	640	1		
		Gandikota ... S	9,920	15½	...	...	9,920	15½		
		Yamavaram S	1,600	2½	...	...	1,600	2½		
		Kosinepalle S	7,040	11	...	...	7,040	11		
		Nidijuvvi ... S	2,880	4½	...	...	2,880	4½		
		Kondapuram S	3,840	6	...	...	3,840	6		
	Cuddapah and Ráyachóti.	Idupalapaya S	28,160	44	...	...	28,160	44	Notfn. of 11th June 1883.	
		Redlacheruvu S	5,120	8	...	...	5,120	8	Notfn. No. 304 of 24th July 1886.	
	Cuddapah and Sidhout.	Palkonda ... S	81,920	128	...	...	81,920	128	Notfn. of 11th June 1883.	
	Ráyachóti ...	Madhavaram S	5,900	9½	...	...	5,900	9½	Notfn. No. 54 of 14th March 1884.	
		Vandadi hills S	3,400	5½	...	...	3,400	5½		
		Brahmanayerragudi	7,680	12	...	* 1,920	5,760	9	Collr.'s notice of 7th March 1885.	
		Hassanapuram ...	23,040	36	...	* 10,880	12,160	19		

* Rectification of area.

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Cuddapah—*cont.*	Ráyachóti—*cont.*	Mudumpad slopes...	5,760	9	...	...	5,760	9	Notfn. No. 306 of 24th July 1886.	
		Wongimalla S	10,880	17	...	...	10,880	17		
	Ráyachóti and Váyalpád.	Urukonda	8,960	14	...	...	8,960	14		
		Rekkalakonda ...	6,400	10	...	...	6,400	10	Notfn. No. 54 of 14th March 1884.	
	Kadiri and Pulivendla.	Gorivikanama ...	28,800	45	...	...	28,800	45		
		Dorigallu	30,720	48	...	...	30,720	48		
		Ishwaramala ...	15,360	24	...	...	15,360	24	Do. do.	
		Kokanti	2,000	3	...	...	2,000	3		
		Kadiri	10,240	16	...	...	10,240	16		
		Vellichelamalla ...	3,200	5	...	...	3,200	5	Notfn. No. 305 of 24th July 1886.	
		Thirumaladevara-konda.	9,600	15	...	...	9,600	15	Notfn. No. 54 of 14th March 1884.	
	Kadiri ...	Nigadi	19,640	31	...	...	19,640	31	Notfn. No. 305 of 24th July 1886.	
		Kukkarazukonda ...	5,120	8	...	...	5,120	8	Notfn. No. 54 of 14th March 1884.	
		Tumala	25,600	40	...	...	25,600	40		
		Malakavemala ...	1,920	3	...	...	1,920	3		
		Tummalamala ...	6,400	10	...	...	6,400	10		
		Kondagamerla ...	3,200	5	...	...	3,200	5		
		Somarazumala, East	1,280	2	...	...	1,280	2		
		Goduvelagala ...	1,920	3	...	...	1,920	3	Notfn. No. 305 of 24th July 1886.	
		Mudupalajuvi ...	1,440	2	...	...	1,440	2		
		Tavalam	5,120	8	...	...	5,120	8	Notfn. No. 54 of 14th March 1884.	Avalakonda, Mudimadugu and Horsley-konda.
		Madhanikonda S	1,750	3	...	...	1,750	3		
		Pentzupad S	2,870	4½	...	...	2,870	4½		
		Horsleykonda ...	23,870	37½	...	...	23,870	37½		
		Mothugamala S	2,560	4	...	...	2,560	4		
	Madanapalle...	Mallaiakonda S	15,023	23½	...	...	15,023	23½	•	Mallaiakonda and Yaddala-varipalle.
		Nallakonda S	3,200	5	* 640	† 640	3,200	5		
		Pulikonda ... S	2,560	4	...	...	2,560	4	Notfn. No. 305 of 24th July 1886.	
		Potapolu ... S	364	1	...	...	364	1		
		Kukarazupalle S	1,660	3	...	...	1,660	3		
	Váyalpád and Madanapalle.	Tarikonda	6,400	10	...	...	6,400	10		
		Gutapaliem ...	2,560	4	...	...	2,560	4		
		Yellutla	4,840	7½	...	...	4,840	7½		Left reserved land after settlement.
		Gajjbuchikona ...	320	½	...	...	320	½	Notfn. No. 54 of 14th March 1884.	
		Yerramorallajedu...	3,680	5¾	...	...	3,680	5½		
		Ankalammakonda..	2,800	4	...	...	2,800	4		
		Nurukupalakonda...	8,820	13¾	...	...	8,820	13½		
	Váyalpád ...	Doddipalle ...	2,560	4	...	...	2,560	4		
		Sorakayalapeta ...	2,560	4	...	...	2,560	4		
		Peddamallela ..	3,200	5	...	...	3,200	5	Notfn. No. 306 of 24th July 1886.	
		Marella	7,680	12	...	...	7,680	12		
		Talakona	19,840	31	...	...	19,840	31		
		Bhakarapet ...	9,800	15	...	...	9,800	15		
		Total ...	1,070,510	1,672½	22,496	* 24,960 † 640	1,067,406	1,668		
Kurnool.	Sirvél and Nandyál.	Sirvél ... S	128,000	200	...	...	128,000	200	Notfn. of 21st April 1883.	
	Nandyál and Nandikótkur.	Nandyál ... S	192,000	300	...	...	192,000	300		
	Nandikótkur ...	Nandikótkur S	256,000	400	...	...	256,000	400		
	Cumbum ...	Uyyalavada S	448,000	700	...	...	448,000	700	Notfn. No. 198 of 17th Nov. 1883.	
	Cumbum and Márkápur.	Cumbum ... S								
	Márkápur ...	Márkápur ... S								
	Cumbum ...	Northern Veli-gondas S	19,200	30	...	...	19,200	30	Notfn. No. 199 of 17th Nov. 1883.	
		Southern do. S	19,200	30	...	...	19,200	30		
		Western do. S	10,880	17	...	...	10,880	17		

* Rectification of area. † Transferred to Form 59-A.

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Kurnool—*cont.*	Yerramalais ...	Rámallakót S	2,000	3	...	...	2,000	3	Notfn. No. 74 of 6th Mar. 1888.	
		Lanjabanda ...	2,000	3	...	...	2,000	3		
		Yaipalapadu ...	3,500	5½	...	...	3,500	5½		
		Dhone	14,000	22	...	...	14,000	22		
		Gadithemadugu ...	3,000	5	...	...	3,000	5		
		Total ...	1,097,780	1,715½	...	...	1,097,780	1,715½		
Bellary.	Adóni ...	Ganekolu ... S	1,118	2	...	...	1,118	2	Notfn. No. 175 of 16th Sept. 1884.	
		Badenahalu S	792	1	*148	...	940	1		
		Katalam ... S	681	1	...	*23	658	1		
		Halekota ... S	486	1	...	*48	438	1		
		Sulekeri	1,342	2	...	...	1,342	2		
		Halevy ... S	1,145	2	*64	...	1,209	2		
		Nundavaram S	971	1½	...	*2	969	1½		
		Ráyachóti ... S	1,863	3	...	...	1,863	3		
		Kurimetla S	3,341	5	...	...	3,341	5		
		Bunivasi ... S	1,964	3	...	...	1,964	3		
		Kotekallu ... S	2,569	4	...	...	2,569	4		
		Adóni	5,000	8	...	...	5,000	8		
		Kupgul	4,650	7	...	...	4,650	7		
		Tungabhadra ...	4,633	7	...	...	4,633	7		
		Kosgi	2,970	5	...	...	2,970	5		
		Kudbur ... S	2,952	5	*4	...	2,956	5		
	Alúr	Gummanur S	649	1	...	...	649	1	Notfn. No. 65 of 20th Feb. 1888.	
		Chippigiri S	1,182	2	...	...	1,182	2	Notfn. No. 123 of 27th April 1888.	
		Degalahalu S	110	...	...	...	110	...		
		Yeruru ... S	535	1	...	*11	524	1		
	Bellary ...	Timmapuram S	1,267	2	...	†1,046	...	...		
		•				*221				
		Bellary ... S	8,000	12	...	...	8,000	12	Notfn. No. 51 of 12th March 1884.	
		Mincheri ... S	4,000	6	...	...	4,000	6		
		Kurrugodu ...	...	...	1,000	...	1,000	1½	Notfn. No. 163 of 10th June 1889.	
		Tekkalakota ...	...	...	600	...	600	1		
		Suguru	...	...	500	...	500	1		
		Nadivi	...	...	450	...	450	½		
		Halekota ... S	...	...	640	...	640	1		
	Hospet ...	Gound	3,000	5	...	...	3,000	5	Notfn. No. 197 of 16th Nov. 1883.	
		Hospet	5,000	8	...	...	5,000	8		
		Jog	4,000	6	...	...	4,000	6		
		Oblagudi	1,000	1½	...	...	1,000	1½		
		Tornagul ... S	2,100	3	...	...	2,100	3	Notfn. No. 102 of 17th May 1884.	
	Kúdligi and Hospet.	Billekal	14,000	22	*80	...	14,080	22	Notfn. No. 22 of 21st Jan. 1889.	
		Buckasagar ...	8,000	12	...	*2,000	6,000	9		
		Bandri	7,000	11	...	...	7,000	11	Notfn. No. 197 of 16th Nov. 1883.	
	Kudligi ...	Chiribi ... S	3,000	5	...	...	3,000	5	Notfn. No. 174 of 13th Sept. 1884.	
		Gollalingammanahalli. S	1,000	1½	...	†1,000	...	...		
		Tumurgudi S	2,500	4	...	...	2,500	4	Notfn. No. 79 of 26th Mar. 1889.	
		Somalapur S	1,000	1½	*1,600	...	2,600	4		
		Sunkadakal ...	7,843	12½	...	...	7,843	12½		
		Shivpur ... S	9,000	14	...	...	9,000	14		
		Banavikal	3,000	5	...	...	3,000	5	Notfn. No. 79 of 26th Mar. 1889.	
		Nimblagiri ...	4,800	7½	...	...	4,800	7½		
		Gudekota	7,000	11	...	...	7,000	11		
	Hadgalli and Harpanhalli.	Harada	18,000	28	...	...	18,000	28	Notfn. of 14th Jan. 1885.	
		Sogay	4,200	6½	...	...	4,200	6½		
	Harpanhalli ...	Jitnakatta ...	12,646	20	...	...	12,646	20	Notfn. No. 116 of 20th April 1888.	
		Jangukalgutta ...	12,882	20	...	...	12,882	20		
		Alagilivada ...	1,956	3	...	...	1,956	3		
		Uchingidrug ...	4,291	7	...	...	4,291	7		
	Ráyadrug ...	Ráyadrug	6,000	9	...	...	6,000	9	Notfn. No. 150 of 21st May 1885.	
		Dharmapuri S	3,600	5½	...	...	3,600	5½		
		Argupa	1,000	1½	...	*50	950	1½		
		Boodikonda ...	1,000	1½	...	...	1,000	1½	Notfn. No. 157 of 8th June 1888.	
		Total ...	2,01,038	314	5,086	*2,355 †2,046	201,723	315		

* Rectification of area. † Transferred to Form 59-A.

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Anántapur.	Gooty ...	Peddadoddi ...	3,200	5	...	...	3,200	5	Notfn. No. 203 of 20th May 1887.	
		Jakkalacheruvu ...	3,200	5	...	...	3,200	5		
		Pamidi	640	1	...	...	640	1		
		Nagasamudram ...	9,600	15	...	...	9,600	15		
		Cutturmulla ...	7,680	12	...	...	7,680	12		
		Bhadrampalle ...	2,560	4	...	...	2,560	4		
		Marutla	11,520	18	...	...	11,520	18		
		Tarramalla ...	8,960	14	...	...	8,960	14		
		Yadaki	5,120	8	...	...	5,120	8	Notfn. No. 134 of 28th Feb. 1887.	
		Guntakal	...	...	900	...	900	1½	Notfn. No. 252 of 13th Aug. 1889.	
		Muchukota S	6,400	10	...	...	6,400	10	Notfn. No. 191 of 6th Oct. 1884.	
	Muchukota ...	Durgam ... S	3,200	5	...	...	3,200	5	Notfn. No. 205 of 20th May 1887.	
		Kudair	4,480	7	...	...	4,480	7		
		Uparapalli S	640	1	...	...	640	1		
		Dadithota	1,920	3	...	...	1,920	3	Notfn. No. 134 of 28th Feb. 1887.	
		Yellutla	5,120	8	...	...	5,120	8		
		Chillawaripalle ...	3,840	6	...	...	3,840	6		
		Konakuntla ...	1,280	2	...	...	1,280	2		
		Nairjampalle ...	1,920	3	...	...	1,920	3		
		Yelanur	320	½	...	...	320	½		
		Gootoor ... S	6,400	10	...	...	6,400	10	Notfn. No. 166 of 8th May 1886.	
	Dharmavaram.	Kalyandrug S	960	1½	...	...	960	1½	Notfn. No. 8 of 22nd Dec. 1886.	
		Ramgherry ...	10,240	16	...	...	10,240	16		
		Bhadrapur S	3,200	5	...	...	3,200	5		
	Penukonda ...	Nyalakota S	7,680	12	...	...	7,680	12	Notfn. No. 166 of 8th May 1886.	
		Penukonda hill S	1,600	2½	...	...	1,600	2½		
		Somandapally S	10,240	16	...	...	10,240	16		
		Yerlampalle S	2,240	3½	...	...	2,240	3½		
		Mallappakonda S	5,120	8	...	...	5,120	8		
		Mallakaveimlakonda. S	960	1½	...	...	960	1½	Notfn. No. 166 of 8th May 1886.	
		Naradikonda S	2,560	4	...	...	2,560	4		
		Janavaripalle ...	3,200	5	...	...	3,200	5	Notfn. No. 74 of 26th Oct. 1888.	
		Agraharam ...	2,300	3½	...	...	2,300	3½		
		Venglumcheruvu.	2,880	4½	...	...	2,880	4½		
	Hindupur ...	Yerrakonda S	4,420	7	...	...	4,420	7	Notfn. No. 166 of 8th May 1886.	
		Amagondapalium S	16,360	25½	...	...	16,360	25½		
		Dokulkonda S	2,880	4½	...	...	2,880	4½		
		Kondur	400	½	...	...	400	½	Notfn. No. 232 of 6th Aug. 1888.	
		Gopidevarapalle S	1,920	3	...	...	1,920	3		
		Total ...	167,160	261	900	...	168,060	262½		
Nilgiris.	Ootacamund...	Fern Hill Shola S	10	...	...	...	10	...	Notfn. No. 428 of 8th Nov. 1886.	
		Addition to Fairlawns block No. I. S	22	...	...	...	22	...		
		Addition to Doddabetta block No. II. S	12	...	...	...	12	...		
		Addition to Doddahalla. S	10	...	...	...	10	...		
		Bilikal road S	25	...	...	...	25	...		
	Naduvatam ...	Devamalai S	229	½	...	...	229	½	Notfn. No. 54 of 24th May 1885.	
	Sigúr	Sigúr	41,127	64	...	...	41,127	64		
	Coonor ...	Honnathalai (South). S	218	½	...	...	218	½	Notfn. No. 168 of 20th April 1886.	
		Bettumund S	137	...	...	...	137	...		
		Rallia ... S	382	½	* 3	...	385	½		
		Little Rallia S	29	...	...	...	29	...		
		Rallia Shola S	30	...	...	...	30	...		
		Halakaray S	172	½	...	...	172	½		
		Teppakuchi S	119	½	...	...	119	½		
		Billithittu ... S	35	...	...	...	35	...		
		Dolphin ... S	65	...	...	...	65	...		
		Guernsey ... S	14	...	...	...	14	...		
		Kodámálai S	15	...	...	...	15	...		
	Kótagiri ...	Naduhatti S	509	1	...	* 33	476	1		
		St. Catharine's Fall S	124	½	...	...	124	½		
		Constantia S	35	...	...	...	35	...		
		Tuttapolliam S	54	...	...	...	54	...		
		Gudakalhalla S	299	½	...	...	299	½		

* Rectification of area.

Area of Reserved Lands, 1889-90—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1890. Acres.	Area on 31st March 1890. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Nílgiris—*cont.*	Kótágiri—*cont.*	Bettu Nos. 1 and 2 S	29	...	...	...	29	...	Notfn. No. 168 of 20th April 1886.	
		Kunnavara addition. S	97	...	...	...	97	...		
		Kanavatti ... S	16	...	...	...	16	...		
		Deepdale ... S	361	½	...	...	361	½		
		Gudakal ... S	600	1	...	...	600	1		
		Clyffe ... S	33	...	...	...	33	...		
		Yercaudhalla S	20	...	...	...	20	...		
		Konakarai slopes S	1,864	3	...	...	1,864	3		
		Doddabetta S	105	...	...	...	105	...		
		Shamrock ... S	43	...	...	...	43	...		
		Bikkehatti S	19	...	...	...	19	...		
		Ittakal, Nos. 1 and 2. S	21	...	...	...	21	...		
		Mavada ... S	211	½	...	...	211	½		
		Kuttada, Nos. 1 and 2. S	29	...	...	...	29	...		
		Vagapanai ... S	2,648	4	...	...	2,648	4		
		Denad ... S	2,073	3	...	...	2,073	3		
		Sundatti ... S	124	½	...	...	124	½		
		Kunshola ... S	159	1	...	...	159	1		
		Kirkanara, Nos. 1 and 2. S	24	...	...	...	24	...		
		Kellatti ... S	17	...	...	...	17	...		
		Hadumund S	48	...	...	...	48	...		
		Uppatti ... S	53	...	...	...	53	...		
		Doddakavu S	62	...	...	...	62	...		
		Ullavanad shola S	57	...	...	...	57	...		
		Sinnattu shola S	51	...	...	...	51	...		
		Madanad ... S	723	1	...	...	723	1		
		Kodanad Valley S	294	½	...	..	294	½		
		Nadukaduhalla S	908	1½	...	* 23	885	1½		
		Nedugula ... S	89	½	...	...	89	½		
		Longwood additions. S	31	...	...	...	31	...		
	Kullár ...	Kullár additions S	72	...	...	...	72	...		
		Benhope, No. 2 S	34	...	...	...	34	...		
		Jakanare slopes S	6,419	10	...	...	6,419	10		
		Kallúr ... S	388	½	...	...	388	½		
		Total ...	61,394	96	* 3	* 56	61,341	96		
		Grand Total ...	4,110,154	6,424	353,320	{ * 69,911 † 123,873 }	4,269,690	6,671		

Abstract.

District.	Area on 1st April 1889.	Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1890.
	SQ. M.	SQ. M.	SQ. M.	SQ. M.
Ganjam	527	...	...	527
Vizagapatam ...	...	10½	...	10½
Godávari	704	354 ...	† 92½ * 48½	917
Kistna	641	26 * 1	† 50 * 2	616
Nellore	493	* 115½ ...	† 48½ * 16½	543½
Cuddapah	1,672½	* 35½ ...	† 1 * 39	1,668
Kurnool	1,715½	...	...	1,715½
Bellary	314	5 * 2½	† 3 * 3½	315
Anantapur	261	1½	...	262½
Nílgiris	96	...	...	96
Total ...	6,424	397 * 154½	† 195 * 109½	6,671

* Rectification of area. † Transferred to Form 59-A.

ANNUAL FORM No. 59-D.

Forest Department, Madras, Northern Circle.

Area of Leased Forests, 1889-90.

District.	Range.	Name of Forest.	AREA ON 1ST APRIL 1889.		ADDED DURING THE YEAR.	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 31ST MARCH 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Bellary ...	Sandúr ...	Sandúr ...	40,000	62½	...	...	40,000	62½	...	
Nílgiris ...	Mudumalai ...	Mudumalai ...	46,639	73	...	...	46,639	73		
		Total ...	86,639	135½	...	...	86,639	135½		

ANNUAL FORM No. 59-E.

Forest Department, Madras, Northern Circle.

Area of Reserved Forests under other orders, 1889-90.

District.	Range.	Name of Forest.	AREA ON 1ST APRIL 1889.		ADDED DURING THE YEAR.	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 31ST MARCH 1890.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Vizagapatam.	Pálkonda ...	Rupayi ...	300	½	...	...	300	½	Collector's order, dated 1st Aug. 1888.	
		Donabayi ...	20	...	...	...	20	...		
		Mekava ...	1,500	2½	...	...	1,500	2½		
		Yegalada ...	250	½	...	...	250	½		
		Kusumuru ...	3,500	5½	...	...	3,500	5½		
		Gumpayi ...	1,500	2½	...	...	1,500	2½		
		Barna ...	4,500	7	...	...	4,500	7		
		Antikonda ...	3,000	4½	...	...	3,000	4½		
		Samaralli ...	20	...	...	...	20	...		
		Sumbakonda ...	10	...	...	...	10	...		
		Total ...	14,600	23	...	...	14,600	23		

Annual Form No. 60.

Forest Department, Madras, Northern Circle.

Area of Plantations, 1889-90.

District.	Range.	Name of Plantation.	On 1st April 1889.		Added during 1889-90.		On 31st March 1890.		Remarks.
			Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
			ACS.	RS.	ACS.	RS.	ACS.	RS.	
Godávari.	Narsápur ...	Rustambadu ...	24	4,197	9	310	59	4,507	1866-67.
		Sitarampuram ...	26						
	Amalápuram.	Bendemurlunka (old).	27	2,014	13	338	60	3,742	1875-76.
		Do. (new).	20	1,390					1882-83.
		Total ...	97	7,601	22	648	119	8,249	
Kistna.	Bandar ...	Kara	14	387	...	4	14	391	
		Weld	75	4,116	...	543	75	4,659	1885.
		Kódúr	40	335	...	48	40	383	
		Gopavanipalem ...	35	1,092	10	297	45	1,389	
		Kanukolu	147	2,236	8	599	155	2,835	
		Allinagaram ...	126	879	...	75	126	954	
		Bomminampadu ...	26	407	...	48	26	455	
		Vamavarampadu ...	16	273	...	...	16	273	
		Vanudhuru ...	26	451	...	52	26	503	
	Bezváda ...	Gavuravaram ...	30	351	...	58	30	409	
	Bápatla ...	Bápatla	17	584	1	87	18	671	
		Karlapalem ...	79	4,221	— 7*	— 168	72	4,018	* Cleared.
						— 371*			
		Vedhullapalle ...	13	467	...	...	13	467	
		Wardarevu ...	72	3,727	...	104	72	3,831	
		Nayanapalli ...	12	1,256	2	84	14	1,340	
		Pandhillapalli ...	14	594	1	84	15	678	
		Total ...	742	21,376	22	2,251	757	23,256	
					— 7	— 371			
Nellore.	Casuarina Plantation.	Dugarázpatam ...	565	40,889	70	1,411	635	42,300	1873.
		Kothapatnam ...	485	31,446	30	1,036	515	32,482	
		Tamminapatam ...	519	44,399	...	729	519	45,128	1873.
		Utukúr	180	16,182	...	44	180	16,226	1875.
		Varani	292	34,780	...	66	292	34,846	1874.
	Kávali ...	Tummalapenta ...	100	18,787	...	60	100	18,847	1873.
		Ramapatam ...	60	19,620	...	60	60	19,680	
		Kothapatam ...	146	14,766	...	48	146	14,814	
		Kanuparthi ...	250	16,598	...	48	250	16,646	1873.
	Sríharikót ...	Chandrasikuppam.	10	718	...	4	10	722	
	Atmakúr. ...	Mamudur	9	1,434	...	...	9	1,434	
		Total ...	2,616	2,39,619	100	3,506	2,716	2,43,125	
Cuddapah.	Kódúr ...	Kódúr	37	7,162	...	72	37	7,234	1865.
		Uparapalle ...	108	8,474	...	71	108	8,545	1869.
		Reddipalle ...	925	13,381	...	479	925	13,860	1870.
		Arimanibanda ...	4	846	...	57	4	903	1884.
		Pullagundlamadugu	55	290	...	...	55	290	1887.
	Rájampet ...	Pullampet ...	426	8,230	...	124	426	8,354	1871.

Area of Plantations, 1889-90—*cont.*

District.	Range.	Name of Plantation.	On 1st April 1889.		Added during 1889-90.		On 31st March 1890.		Remarks.
			Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
			ACS.	RS.	ACS.	RS.	ACS.	RS.	
Cuddapah—*cont.*	Cuddapah ...	Kamalápuram ...	454	10,793	...	131	454	10,924	1869.
		Rámesvaram ...	...	...	91	35	91	35	
		Total ...	2,009	49,176	91	969	2,100	50,145	
Nílgiris.	Mudumalai ...	Mudumalai ...	61	16,834	...	157	61	16,991	
	Ootacamund ...	Benne	40	11,299	...	...	40	11,299	
		Chemenguli ...	33	3,861	...	...	33	3,861	1879.
		Muthanád	95	6,713	...	...	95	6,713	1880–83.
		Brooklands ...	10	328	...	...	10	328	1862.
		Marliamund ...	11	833	...	...	11	833	1860.
		Snowdon	7	222	...	1	7	223	1860.
		Governor's shola ...	277	10,625	...	45	277	10,670	1880.
		Aramby	233	15,222	11½	887	244½	16,109	1863.
		Cairn Hill	168½	13,342	9¼	744	178¼	14,086	1877.
	Melúr	Devashola ...	14	1,640	...	...	14	1,640	1880.
	Coonoor ...	Blackbridge ...	56	1,921	...	...	56	1,921	1874.
		Bleakhouse ...	87	2,344	...	5	87	2,349	1857.
		Bandy shola ...	94	2,468	...	7	94	2,475	1857.
		Coonoor Peak ...	234½	7,351	3	302	237½	7,653	1872.
		Tippakutchi ...	35	783	...	...	35	783	1882.
		Rallia	105	2,588	23	829	128	3,417	1872.
	Kullar ...	Kullar	119½	4,342	100	1,171	219½	5,513	1886.
		Municipal assessment.	...	1,752	...	2,359	...	4,111	
		Total ...	1,680½	1,04,468	147¼	6,507	1,827¾	1,10,975	

CULTURAL OPERATIONS.

Ganjam.	Chokapad ...	Miscellaneous items.	...	103	...	660	...	763	
		Total ...	...	103	...	660	...	763	
Kistna.	Bezváda ...	Bezváda	...	153	...	93	...	246	
		Kondapalli nursery	...	...	...	43	...	43	
	Palnád ...	Tummurukodu ...	...	...	...	60	...	60	
		Total ...	...	153	...	196	...	349	
Nellore.	Kávali ...	.....	50	324	...	...	50	324	Miscellaneous sowings in forest and among prickly-pear.
	Sríharikót ...	Sríharikót ...	110	1,525	150	33	260	1,558	Sowing and planting of blanks.
		Do. ...	...	...	10	136	10	136	Transplanting from nurseries to the jungle and watering, &c.
	Nellore ...	Kasuba	...	...	150	71	150	71	Dates.
		Allipuram ...	...	...	40	367	40	367	
	Casuarina Plantation.	Dugarázpatam ...	...	...	12	10	12	10	Sowing and planting of blanks.
		Kottapatam ...	...	...	9	9	9	9	
		Tamminapatam ...	...	...	14	22	14	22	
		Total ...	160	1,849	385	648	545	2,497	
Cuddapah.	Kódúr ...	Ballipalle ...	2	1,165	...	195	2	1,360	Nursery.
		Do. Working Circle Compartment 5-B.	12	9	...	...	12	9	
		Do. do. 6-B.	30	319	...	5	30	324	Sowing 200 yegi seedlings.
		Sandakona ...	5	175	...	42	5	217	Watering and filling blanks.
	Cuddapah ...	Appaiapalle ...	25¼	29	...	...	25¼	29	

Area of Plantations, 1889-90—*cont.*

District.	Range.	Name of Plantation.	On 1st April 1889.		Added during 1889-90.		On 31st March 1890.		Remarks.
			Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
			ACS.	RS.	ACS.	RS.	ACS.	RS.	
Cuddapah—*cont.*	Proddutur ...	Gandikota ...	321	18	...	...	321	18	
		Pennér banks ...	160	199	...	...	160	199	
	Madanapalle	Horsleykonda ...	1	39	...	32	1	71	Nursery.
		Do. ...	1¼	37	...	32	1¼	69	
	Váyalpád ...	Ankalammakonda.	22	61	...	...	22	61	
		Nurukupalakonda.	5	41	...	...	5	41	
		Madhanikonda ...	...	...	½	2	½	2	Sowing sandalwood seedlings.
		Total ...	584½	2,092	½	308	585	2,400	
Kurnool.	Nandyál ...	Nandyál	...	57	...	17	...	74	Nursery for Eucalyptus.
	Nandikótkur	Miscellaneous items.	...	4	...	4	...	8	Date, &c.
		Total ...	...	61	...	21	...	82	
Bellary.	Sandúr ...	Ramandrug ...	...	108	...	46	...	154	
		Hampi	...	20	...	− 20	...	...	Abandoned.
	Kudligi ...	Kúdligi	...	...	...	3	...	3	
		Gollapalli	...	...	...	27	...	27	
		Miscellaneous ...	...	75	...	140	...	215	Sowing bamboo seeds.
		Total ...	...	203	...	216 − 20	...	399	
Nilgiris.	Ootacamund ...	Lovedale	2½	1,082	5½	406	8	1,488	
	Coonoor ...	Ghát reserve ...	12	466	2	39	14	505	
		Lamb's rock ...	2	25	...	...	2	25	
		Sim's Park ...	6	2,024	3	367	9	2,391	
	Kótagiri ...	Longwood ...	7	329	1½	80	8½	409	
		Miscellaneous items.	...	657	...	...	...	657	
		Total ...	29½	4,583	12	892	41½	5,475	
		Total Plantations...	7,144½	4,22,240	382¼ − 7	13,881 − 371	7,519¾	4,35,750	
		Total Cultural Operations.	774	9,044	397½	2,941 − 20	1,171½	11,965	
		Add Topes ...	6,865	1,11,572	+ 41 − 51	2,125 − 1,936	6,855	1,11,761	
		Add Direction ...	...	50	...	98	...	148	
		Grand Total A-VIII d ...	14,783½	5,42,906	820¾ − 58	19,045 − 2,327	15,546¼	5,59,624	

Abstract of Form No. 60.

District.	On 1st April 1889.		Added during 1889-90.		On 31st March 1890.	
	Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.
Regular Plantations.						
	ACS.	RS.	ACS.	RS.	ACS.	RS.
Godávari	97	7,601	22	648	119	8,249
Kistna	742	21,376	22 − 7	22,51 − 371	757	23,256
Nellore	2,616	2,39,619	100	3,506	2,716	2,43,125
Cuddapah	2,009	49,176	91	969	2,100	50,145
Nilgiris	1,680½	1,04,468	147¼	6,507	1,827¾	1,10,975
Direction	...	50	...	98	...	148
Total ...	7,144½	4,22,290	382¼ −7	13,979 −371	7,519¾	4,35,898
Cultural Operations.						
Ganjam	...	103	...	660	...	763
Kistna	...	153	...	196	...	349
Nellore	160	1,849	385	648	545	2,497
Cuddapah	584½	2,092	½	308	585	2,400
Kurnool	...	61	...	21	...	82
Bellary	...	203	...	216 −20	...	399
Nilgiris	29½	4,583	12	892	41½	5,475
Total ...	774	9,044	397½	2,941 −20	1,171½	11,965

Annual Form No. 61.

Forest Department, Madras, Northern Circle.

Annual Statement of Topes, 1889-90.

District.	Taluk.	Number of topes.	Area.	Cost		Remarks.
				During year.	To end of year.	
			ACS.	RS.	RS.	
Ganjam	Berhampore	3	13	...	922	
	Goomsur	1	83	...		
	Chicacole	3	5	...		
	Total ...	7	101	...	922	
Vizagapatam ...	Pálkonda	2	56	6	14	
	Total ...	2	56	6	14	
Godávari	Rámachandrapuram ...	−8	−30	...	...	8 topes of this district have been omitted as they have been transferred to the Head of Poramboke and are no longer under the management of the Department.
	Total ...	−8	−30	...	...	
Kistna	Bandar	2 +1	9 +17	58	762	1 tope of 17 acres omitted during 1888-89 is now included.
	Gudiváda	−1	− 5	...	− 281	Sold.
	Bezváda	−1	− 4	...	− 238	
	Nandigáma	1	11	35	377	No topes exist in this taluk.
	Vinukonda	1	6	48	353	
	Narsaraopet	1	7	48	322	
	Sattenapalle	−1	− 6	...	− 15	
	Bápatla	−1	− 2	...	− 1,298	Sold.
	Repalle	−1	− 1	...		
	Guntúr	−1	− 3	...	− 104	No topes exist in these taluks.
	Total ...	6 −6	50 −21	189	1,814 −1,936	
Nellore	Gúdúr	11	124	...	3,206	
	Rápúr	15	183	...	8,533	
	Nellore	33	380	...	6,599	
	Atmakúr	3	12	...	4,420	
	Venkatagiri	9	130	...	2,793	
	Kávali	17	742	...	4,190	
	Udayagiri	4	29	...	2,665	
	Kandukúr	6	13	...	1,853	
	Kanigiri	5	19	...	1,408	
	Ongole	4	107	...	1,212	
	Podili	4	13	...	1,165	
	Total ...	111	1,752	...	38,044	
Cuddapah	Pullampet	8 + 1	69 + 24	115	5,805	* One old Jungle Conservancy Tope of 24 acres omitted during the past years is now added, the original cost of which is not known.
	Sidhout	4	40	89	8,183	
	Badvél	6	63	60	2,944	
	Proddutur	2	32	...	1,715	
	Jammalamadugu	9	309	54	12,554	
	Pulivendla	10	638	119	5,158	
	Cuddapah	7	148	60	6,163	
	Kadiri	8	73	132	2,318	
	Madanapalle	8	68	99	6,653	
	Ráyachóti	5	95	65	1,712	
	Váyalpád	3	30	...	3,442	
	Total ...	71	1,589	743	56,647	
Kurnool	Rámallakót	7	66	...	839	
	Pattikonda	5	29	...	1,879	
	Koilkuntla	4	9	...	3,683	
	Nandikótkur	1	2	45	406	
	Nandyál	3	33	98	1,331	
	Sirvél	2	16	114	684	
	Cumbum	2	13	...	22	
	Márkápur	3	14	...	257	
	Total ...	27	182	257	9,101	

Annual Statement of Topes—*cont.*

District.	Taluk.	Number of topes.	Area.	Cost		Remarks.
				During year.	To end of year.	
			ACS.	RS.	RS.	
Bellary	Bellary	6	86	...	...	
	Kúdligi	4	9	...	...	
	Hadgalli	2	11	...	41	
	Harpanahalli	2	3	...	...	
	Alúr	11	101	...	88	
	Adóni	2	13	46	372	
	Ráyadrug	4	17	85	359	
	Total ...	31	240	131	860	
Anantapur ...	Anantapur	5	124	191	507	
	Gooty	10	184	103	276	
	Tadpatri	15	565	52	223	
	Dharmavaram	29	1,555	182	2,562	
	Hindupur	16	121	53	259	
	Penukonda	15	310	166	382	
	Madakasíra	5	26	52	150	
	Total ...	95	2,885	799	4,359	
	Grand Total ...	350*	6,855	2,125 −1,936	1,11,761	

* The decrease of 12 topes in number and 10 acres in area is explained above.

ABSTRACT.

District.	Number.	Area.	Cost	
			During year.	To end of year.
		ACS.	RS.	RS.
Ganjam	7	101	...	922
Vizagapatam...	2	56	6	14
Godávari	...	...	...	...
Kistna	6	50	189	1,814
Nellore	111	1,752	...	38,044
Cuddapah	71	1,589	743	56,647
Kurnool	27	182	257	9,101
Bellary	31	240	131	860
Anantapur	95	2,885	799	4,359
Total ...	350	6,855	2,125	1,11,761

ANNUAL FORM No. 62.

Forest Department, Madras, Northern Circle.

Area of Forest Tracts protected from Fire during 1889-90.

District and Range.	Forest Tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Area burnt.	Area actually protected.	Amount expended.			
		ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.		
Ganjam ... Chokapád ...	Dimrijholi ...	5,464	14	5,480	...	5,480	13	27	1889	
	Rambha	9,300	26	9,300	...	9,300	30	56		
	Darpangia ...	16,110	401	16,160	...	16,160	15	416	1885	
	Baibali	21,840	663	21,920	...	21,920	35	698		
	Gullery	23,787	24	23,860	...	23,860	28	52		
	Koolada	2,706	14	2,760	...	2,760	193	207		
Bodoboro-singhi.	Teleki	15,130	22	15,200	...	15,200	30	52		
	Kaliamba ...	5,180	23	5,200	...	5,200	26	49		
	Rogoda	15,986	22	16,000	...	16,000	15	37		
	Vinjagheri ...	5,995	12	6,000	...	6,000	7	19	1889	
	Malati	1,720	28	1,720	...	1,720	7	35		
Pondokol ...	Hukuma ...	4,155	10	4,160	16	4,144	16	20		
	Rayigoda ...	6,692	10	6,700	51	6,649	10	20		
	Bondagocha ...	4,399	7	4,400	20	4,380	10	17		
	Pipalapanka ...	7,697	10	7,700	25	7,675	60	70		
	Dhougam ...	2,391	10	2,400	...	2,400	5	15		
	Dabuki	...	...	1,450	...	1,450	...	...	1890	
	Moondapitta ...	6,880	10	6,880	...	6,880	10	20	1889	
Gayagonda ...	Ambazara ...	23,979	688	32,000	6,788	25,212	137	825	1885	
	Chondorgiri ...	13,300	470	19,280	3,386	15,894	104	574		
	Gundribadi ...	...	...	12,200	133	12,067	...	...	1890	
	Gogodo	...	...	15,240	900	14,340	...	...		
Jaganath-prasád.	Jaganathprasád.	24,190	43	26,200	1,920	24,280	32	75		
	Paichalia ...	11,777	15	13,760	1,960	11,800	12	27		
	Brahmanosai ...	7,068	15	8,080	1,126	6,954	5	20		
Buguda ...	Vishnuchakram...	4,590	7	4,860	264	4,596	10	17	1889	
	Panchabuthi ...	3,860	10	4,320	500	3,820	...	10		
	Kurcholi ...	4,890	10	5,520	560	4,960	15	25		
	Kriyamba ...	22,266	19	23,320	1,121	22,199	30	49		
	Sandusalya ...	2,000	5	2,000	...	2,000	...	5		
	Bodochendana ...	800	5	800	...	800	...	5		
Berhampore.	Ramagodo ...	6,620	161	6,620	...	6,620	25	186	1885	
	Bainamari ...	3,750	156	3,750	...	3,750	19	175		
	South Mohiri ...	3,730	312	3,730	...	3,730	23	335		
	Mohiri Unreserve.	3,930	131	...	...	...	...	131		
	Podhora	...	...	760	...	760	9	9	1890	
	Total ...	292,182	3,353	339,730	18,770	320,960	925	4,278		
Vizagapatam. Sarvasiddhi ...	Peddapalli ...	8,930	...	8,960	...	8,960	64	64	1889	
Pálkonda ...	Pálkonda ...	...	...	14,600	40	14,560	161	161		
	Total ...	8,930	...	23,560	40	23,520	225	225		
Godávari ... Bhadrácha-lam.	Dumagudem ...	4,190	5	6,110	...	6,110	37	42	1887	
	Arlagudem ...	4,216	5	6,136	...	6,136	36	41		
	Gogubaka ...	1,346	3	1,666	...	1,666	36	39	1888	
Marrigudem.	Rapak ...	...	9	7,000	160	6,840	8	17	1887	
	Ramchandram ...	8,380	9	10,300	...	10,300	8	17		
	Tatlunka ...	9,440	...	12,000	...	12,000	8	8		
Rékapalle ...	Mattapalli ...	...	...	9,500	...	9,500	...	...	1889	
Rajahmundry	Kothapalli ...	17,980	106	18,000	300	17,700	33	139	1887	
	Devancheruvu ...	2,330	74	2,330	...	2,330	30	104		
	Ramasaram ...	1,250	14	1,250	...	1,250	30	44	1888	
	Kovida ...	1,280	6	1,280	...	1,280	30	36		
	Murari ...	900	6	900	...	900	30	36	1889	
	Totapalle ...	...	...	3,994	...	3,994	30	30		

Area of Forest Tracts protected from Fire during 1889-90—*cont.*

District and Range.	Forest Tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Area burnt.	Area actually protected.	Amount expended.			
		ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.		
Godávari—*cont.* — Ellore	Velagalapalle	2,200	16	2,200	..	2,200	16	32	1888	
	Chintalapudi	1,100	16	1,100	...	1,100	16	32		
	Barrikonda	2,550	32	2,700	...	2,700	16	48		
	Erraguntapalli	9,400	31	9,600	...	9,600	16	47		
	Bandamcherla	5,200	32	5,200	...	5,200	16	48		
	Ramasingavaram	1,920	16	1,920	...	1,920	16	32		
	Tadikalapudi	2,560	16	2,560	...	2,560	16	32		
	Jilugumille	...	...	3,300	...	3,300	16	16	1889	
	Beddadavole	...	...	15,000	...	15,000	16	16		
	Marlagudem	...	...	2,700	...	2,700	16	16		
	Total	76,242	396	126,746	460	126,286	476	872		
Kistna — Bezváda	Kondapalle	8,320	2,367	8,320	1,000	7,320	427	2,794	1884	
	Kothur	...	...	7,593	11	7,582	13	13	1889	
Vinukonda	Bollapalli	6,340	895	6,400	...	6,400	135	1,030	1885	
	Guttikonda	...	...	42,241	2	42,239	2	2	1889	
Pálnad	Muttukur	6,400	256	6,400	...	6,400	58	314	1885	
	Madinapadu	9,600	380	9,600	...	9,600	58	438	1885	
Guntúr	Kondavid	13,153	8	13,156	12	13,144	12	20	1888	
	Tadepalli	...	...	2,300	...	2,300	2	2	1889	
Bandar	Kanukollu	...	...	667	10	657	8	8		
Krosur	Bellamkonda	...	...	1,380	...	1,380	7	7		
	Total	43,813	3,906	98,057	1,035	97,022	722	4,628		
Nellore — Rápúr	Rápúr Veligondas.	24,100	437	27,000	3,280	23,720	296	733	1885	
Udayagiri	Udayagiri do.	21,500	1,007	23,000	3,440	19,560	502	1,509		
Kanigiri	Kanigiri do.	22,900	...	25,000	...	25,000	138	138		
	Total	68,500	1,444	75,000	6,720	68,280	936	2,380		
Cuddapah — Kódúr	Ballipalle (West).	6,307	2,166	6,307	...	6,307	193	2,359	1867	
	Do. (East).	8,929	2,438	8,960	140	8,820	308	2,746	1871	
	Kódúr Hill	6,540	1,773	7,440	240	7,200	303	2,076	1874	
	Vagetikona	3,594	704	3,595	...	3,595	73	777		
	Yerraguntlakota	3,000	1,362	3,000	1,655	1,345	127	1,489	1873	
	Rallakonda	1,565	530	1,565	...	1,565	60	590	1879	
	Gathela	6,798	858	6,800	6,800	...	71	929	1874	
	Thanakonda	1,048	528	1,048	...	1,048	60	588		
Rájampet	Rollamadugu	5,424	362	5,424	5,424	...	...	362	1878	
	Srirangarazupaliem.	3,080	1,193	5,000	80	4,920	69	1,262	1883	
	Vattalúr Hill	2,880	256	2,880	...	2,880	106	362	1887	
Kadiri	Nigadi	14,000	918	14,000	1,200	12,800	91	1,009		
	Malakavemala	8,500	439	8,500	...	8,500	...	439		
	Kondagamerla	3,700	231	3,700	...	3,700	10	241		
	Tumala	2,495	263	2,495	...	2,495	31	294		
	Kokanti	2,000	211	2,000	100	1,900	10	221		
	Gorivikanama	18,000	209	...	...	...	...	209		
Madanapalle	Rekkulakonda	1,200	193	1,200	...	1,200	1	194		
	Mallaiakonda	2,200	229	2,200	...	2,200	43	272		
	Kosuvaripalle	1,400	152	1,400	...	1,400	...	152	1881	
	Sompalle	800	98	...	..	...	...	98		
	Horsleykonda	9,630	688	9,630	...	9,630	105	793		
Váyalpád	Yellutla	3,500	253	3,500	...	3,500	28	281		
	Nadimicherla	2,000	219	2,000	...	2,000	...	219		
	Nurukupalakonda.	3,600	459	3,600	...	3,600	42	501		
	Ankalammakonda	2,000	432	2,000	...	2,000	41	473		
	Gorantlapalle	4,000	222	4,000	...	4,000	...	222		
Cuddapah	Mamillapalle	5,000	1,208	5,000	3,120	1,880	271	1,479	1883	
Cuddapah and Ráyachóti.	Guvalacheruvu	5,500	1,039	7,600	...	7,600	268	1,307	1888	
Ráyachóti	Gadikota	12,309	1,025	12,480	2,132	10,348	228	1,253	1883	
	Sibyala	3,500	93	3,500	...	3,500	43	136		
	Tsundupalle	3,000	49	3,000	...	3,000	25	74	1887	
Sidhout	Arapayakanama.	8,220	1,236	10,000	5,760	4,240	184	1,420	1883	
	Kanamalopalle	1,935	847	4,435	3,120	1,315	208	1,055	1887	
Badvél	Kottakota	8,640	761	8,640	...	8,640	182	943	1885	

Area of Forest Tracts protected from Fire during 1889-90—*cont.*

District and Range.	Forest Tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1890.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Area burnt.	Area actually protected.	Amount expended.			
		ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.		
Cuddapah—*cont.* — Proddutur	Mudireddipalle	10,059	930	12,000	660	11,340	91	1,021	1883	
	Rámesvaram	91	29	...	...	...	...	29		
	Thallamapuram	153	34	...	...	...	...	34		
	Vellela	258	34	...	...	...	...	34		
	Alladupalle	197	33	...	...	...	...	33		
	Payadala	99	19	...	...	...	...	19		
	Nidujubi	696	110	696	...	696	27	137		
	Kottapalle	120	19	...	...	...	...	19		
	Kalamella / Kosinepalle	730	160	430 / 300	... / ...	430 / 300	... / 16	176		
	Modanattupalle	86	18	...	...	...	...	18		
	Anantapuram	138	19	...	...	...	...	19	1881	
	Kallúr	160	17	...	...	...	...	17		
	Kondasankesula	858	110	858	...	858	12	122		
	Gandikota	372	93	372	300	72	...	93		
	Yámavaram	200	91	200	200	...	19	110		
	Dhodiem / Murupandi	1,345	117	589 / 756	... / ...	589 / 756	7	124		
Jammalamadugu.	Malamidikambaladinne. / Kódúr	1,366	156	787 / 579	... / ...	787 / 579	3	159		
	Aravetipalle / Denepalle / Peddadudiala	850	116	200 / 250 / 300	... / ... / ...	200 / 250 / 300	12	128		
	Seshachellam	...	...	176,200	7,281	168,919	1,111	1,111		
	Lakamalais	...	...	112,640	13,630	99,010	694	694		
	Pálkonda	...	...	1,000	60	940	26	26	1890	
	Urukonda	...	...	8,960	...	8,960	1	1		
	General	...	...	...	...	...	14	14		
	Total	194,072	25,749	484,016	51,902	432,114	5,214	30,963		
Kurnool — Atmakúr	Atmakúr-Velgode	...	2,480	...	...	...	...	2,480	1884	
Nandikótkur	Bairluti	500	713	4,000	1,280	2,720	250	963	1887	
Nandyál	Mallalamma	1,800	122	3,000	1,140	1,860	160	282		
Márkápur	Rollapenta	...	78	...	...	...	...	78	1889	
Cumbum	Western Veligondas.	10,877	196	10,880	320	10,560	107	303		
	Southern Veligondas.	...	...	19,200	1,280	17,920	88	88	1890	
Pattikonda	Tekukonda	1,600	6	1,600	8	1,597	49	55	1889	
Rámallakót	East and West Rámallakót.	...	...	2,000	...	2,000	40	40	1890	
	Total	14,777	3,595	40,680	4,023	36,657	694	4,289		
Bellary — Sandúr	Hospet	...	876	1,050	...	1,050	...	876		
	Gound	2,905	592	2,905	...	2,905	...	592	1883	
	Ramandrug	12,635	5,059	14,785	5,593	9,192	2,832	12,908		
	North Eastern	8,010	3,299	16,010	207	15,803				
	Donemalai	9,204	1,718	9,204	6,000	3,204				
	Shivpur	9,000	617	9,000	30	8,970	126	743	1886-87	
	Chiribi	3,000	229	3,000	40	2,960	102	231	1885	
	Sunkadakal	7,000	153	7,000	...	7,000	107	260		
	Malpanagudi	3,000	501	3,000	...	3,000	60	561	1886-87	
Bellary	Forest tract protected by ordinary staff.	...	*3	183,059	7,120	175,939	...	3		* Omitted last year.
	Total	54,754	13,047	249,013	18,990	230,023	3,227	16,274		
Anantapur — Penukonda	Kottakota	4,120	1,273	5,120	250	4,870	206	1,479		
Muchukota	Muchukota	6,400	3,634	6,400	320	6,080	544	4,178	1884	
Hindupur	Amagondapalium.	16,330	1,147	16,360	200	16,160	173	1,320		
	Dokulkonda	2,880	114	2,880	...	2,880	45	159		
	Somarazmalai	1,920	126	1,920	...	1,920	25	151	1885	
Penukonda	Narsampalli	1,280	87	1,280	...	1,280	52	139		
	Mallappakonda	5,120	80	5,120	...	5,120	42	122	1886	

Area of Forest Tracts protected from Fire during 1889-90—*cont.*

District and Range.	Forest Tract.	Up to 31st March 1889.		During dry season of 1889-90.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Area burnt.	Area actually protected.	Amount expended.			
		ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.		
Anantapur —*cont.* — Dharmavaram.	Gootoor ...	6,400	243	6,400	...	6,400	111	354	1887	
	Kalyandrug, North and South.	960	42	960	...	960	54	96	1888	
Muchukota...	Durgum ...	...	...	3,200	...	3,200	58	58	1889	
	Kudair	...	...	4,480	...	4,480	30	30		
	Anantapur ...	...	...	131	...	131	...	...		
Gooty ...	Khojjapalli ...	...	...	367	...	367	10	10	1889	
	Jakkalcheruvu ...	...	...	3,200	...	3,200	12	12		
	Total ...	45,410	6,746	57,818	770	57,048	1,362	8,108		
Nílgiris ... — Mudumalai...	Mudumalai Plantation.	61	1,525	61	...	61	83	1,608	1883	
	Mudumalai ...	341	153	46,578	875	45,703	195	348	1888	
	Benne Plantation.	40	1,008	40	...	40	112	1,120	1886	
	Benne Plantation, part of Block Nos. I and II.	300	85	700	...	700	52	137	1888	
	Moyar	400	272	13,238	8,640	4,598	54	326	1886	
Sígúr ...	Kalhatti Slopes...	1,554	309	9,554	...	9,554	37	346	1886	
	Sígúr	3,022	109	41,127	13,422	27,705	37	146		
Naduvatam.	Naduvatam Sholas.	12,132	245	12,137	55	12,082	60	305	1885	
	Northern Hay ...	3,980	812	3,998	...	3,998	92	904	1883	
	South-East Wynaad Reserve.	3,500	149	3,500	...	3,500	40	189	1886	
Ootacamund.	Marliamund ...	211	322	211	...	211	23	345	1883	
	Aramby ...	430	296	430	2	428	30	326		
	Cairn Hill ...	559	347	559	2	557	54	401		
	Brooklands ...	176	12	176	...	176	20	32	1888	
	Lovedale ...	296	263	296	...	296	22	285	1883	
	Craigmore ...	299	11	299	...	299	20	31	1888	
	Doddabetta ...	991	145	991	...	991	20	165	1886	
	Snowdon ...	1,053	120	1,053	...	1,053	20	140	1883	
	Jakuntha ...	373	42	373	1	372	20	62	1886	
	Muthanad ...	420	267	420	...	420	20	287	1883	
	Governor's Shola.	2,663	816	2,670	2	2,668	40	856		
	Pykara	1,259	184	1,309	3	1,306	27	211		
	Sandynulla ...	818	41	818	...	818	20	61		
	Kengodu ...	451	40	451	...	451	20	60		
	Kadcoopa ...	1,622	29	1,622	15	1,607	20	49		
	Pichelbettu ...	2,791	44	2,991	13	2,978	20	64		
	Huljkal ...	6,411	404	6,411	...	6,411	22	426		
	Rallia	848	506	848	...	848	58	564	1883	
	Black Bridge ...	390	195	390	...	390	41	236		
	Coonoor Peak ...	540	493	540	...	540	52	545		
Coonoor ...	Lamb's Rock ...	708	351	708	...	708	45	396		
	Tiger Hill ...	328	186	328	...	328	32	218		
	Ghât Reserve ...	311	394	311	...	311	263	657		
	Hill Grove ...	187	173	187	...	187	22	195		
	Pillur Slopes ...	3,221	127	3,221	10	3,211	30	157	1887	
	Halakaray ...	420	58	420	...	420	26	84		
	Kótagiri ...	660	710	660	...	660	89	799	1885	
	Jakanaré ...	213	29	213	...	213	16	45	1886	
Kótagiri ...	Konakarai ...	6,758	28	6,758	...	6,758	19	47		
	Do. Slopes.	1,864	23	1,864	30	1,834	16	39		
	Kengarai ...	428	39	428	...	428	14	53	1887	
	Vagapanai Slopes.	2,607	19	2,648	...	2,648	16	35		
	Denad	2,400	35	2,444	...	2,444	23	58		
	Kodanad ...	2,236	51	2,236	10	2,226	29	80		
	Ithalar	460	50	460	...	460	25	75	1886	
	Devashola ...	215	150	215	...	215	68	218	1883	
	Balakola ...	935	167	935	...	935	70	237	1886	
Melúr ..	Athigarhatti ...	34	8	34	...	34	25	33	1887	
	Commandu ...	1,167	231	1,167	...	1,167	96	327	1883	
	Kundahs ...	40,448	337	45,448	2,370	43,078	74	411	1885	
Kullar ...	Barliyár ...	2,215	1,086	2,275	20	2,255	332	1,418	1883	
	Jakanaré Slopes.	6,019	185	6,419	22	6,397	118	303	1886	
	Total ...	121,765	13,681	233,170	25,492	207,678	2,779	16,460		
	Grand Total ...	920,445	71,917	1,727,790	128,202	1,599,588	16,560	88,477		

ABSTRACT OF FORM No. 62.

District.	AREA PROTECTED DURING 1888-89.		DURING DRY SEASON OF 1889-90.				Total cost up to 31st March 1890.	Remarks.
	Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.		
	ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.	
Ganjam	292,182	3,353	339,730	18,770	320,960	925	4,278	
Vizagapatam	8,930	...	23,560	40	23,520	225	225	
Godávari	76,242	396	126,746	460	126,286	476	872	
Kistna	43,813	3,906	98,057	1,035	97,022	722	4,628	
Nellore	68,500	1,444	75,000	6,720	68,280	936	2,380	
Cuddapah	194,072	25,749	484,016	51,902	432,114	5,214	30,963	
Kurnool	14,777	3,595	40,680	4,023	36,657	694	4,289	
Bellary	54,754	13,047	249,013	18,990	230,023	3,227	16,274	
Anantapur	25,410	6,746	57,818	770	57,048	1,362	8,108	
Nilgiris	121,765	13,681	233,170	25,492	207,678	2,779	16,460	
Total ...	920,445	71,917	1,727,790	128,202	1,599,588	16,560	88,477	

ANNUAL FORM No. 63.

Forest Department, Madras, Northern Circle.

Prosecutions for Breaches of Forest Rules during 1889-90.

District.	Cases pending from 1888-89.	NEW CASES OF THE YEAR.					Total cases.	DISPOSED OF DURING THE YEAR.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Ganjam ...	35	2	24	1	6	33	68	43	86	17	61	60	147	8
Vizagapatam ...	41	...	227	22	3	252	293	214	464	48	120	262	584	31
Godávari ...	9	...	19	...	13	32	41	34	56	4	11	38	67	3
Kistna ...	36	...	68	10	29	107	143	66	183	27	83	93	266	50
Nellore ...	28	1	48	5	1	55	83	34	106	32	123	66	229	17
Cuddapah ...	7	5	92	21	2	120	127	78	176	25	53	103	229	24
Kurnool ...	6	1	165	19	9	194	200	118	297	81	269	199	566	1
Bellary ...	7	2	63	18	5	88	95	59	184	32	157	91	341	4
Anantapur ...	6	4	34	3	3	44	50	24	109	19	73	43	182	7
Nilgiris ...	4	...	5	1	2	8	12	10	11	2	4	12	15	...
Total ...	179	15	745	100	73	933	1,112	680	1,672	287	954	967	2,626	145

Cases compounded under section 55 of the Madras Forest Act.

															Amount for which compounded.
															RS. A. P.
Ganjam ...	102	...	39	2	10	51	153	140	146	...	...	140	146	13	449 5 0
Vizagapatam ...	...	...	91	20	...	111	111	111	201	...	...	111	201	...	478 15 0
Godávari ...	...	...	3	...	17	20	20	20	22	...	...	20	22	...	98 15 5
Kistna ...	...	...	95	4	8	107	107	107	164	...	...	107	164	...	402 14 0
Nellore ...	...	...	42	...	...	42	42	42	147	...	...	42	147	...	141 10 0
Cuddapah ...	...	1	57	13	...	71	71	71	180	...	...	71	180	...	983 0 0
Kurnool ...	...	...	5	1	...	6	6	6	6	...	...	6	6	...	150 0 0
Bellary ...	...	...	6	...	...	6	6	6	19	...	...	6	19	...	22 1 6
Anantapur ...	...	...	7	1	...	8	8	8	52	...	...	8	52	...	17 4 0
Nilgiris ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	102	1	345	41	35	422	524	511	937	...	...	511	937	13	2,744 0 11

ANNUAL FORM No. 64.

Forest Department, Madras, Northern Circle.

Summary of Revenue of the different districts, 1889-90.

Budget heads, Receipts.	Direction.	Ganjam.	Vizagapatam.	Godávari	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nílgiris.	Total.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I.—Timber and other produce removed from the forests by Government Agency—												
(*a*) Timber	...	9,939	7	1,973	...	71	16,782	...	33	117	5,948	34,870
(*b*) Firewood and charcoal	...	995	7	...	514	37,827	280	1	1,378	288	17,941	59,231
(*c*) Bamboos	...	159	2	...	120	...	349	...	1,935	180	...	2,745
(*d*) Sandalwood ...	...	...	...	...	...	...	...	...	...	...	5,616	5,616
(*e*) Grass and other minor produce	...	...	...	...	1	8,311	734	457	...	579	1,352	11,434
II.—Timber and other produce removed from the forests by consumers or purchasers—												
(*a*) Timber	...	236	855	32,644	20,789	8,549	16,866	34,440	5,332	2,028	3,827	1,25,566
(*b*) Firewood and charcoal	...	7,446	3,661	9,241	9,301	2,429	32,348	9,698	4,942	1,525	1,736	82,327
(*c*) Bamboos	...	2,059	2,586	14,956	1,204	77	9,139	16,956	38	...	2,299	49,314
(*d*) Grazing and fodder grass	...	7	23	1,959	48,541	16,036	3,814	5,419	878	1,154	1,639	79,470
(*e*) Other minor produce	...	272	1,234	11,882	12,123	13,590	51,838	8,572	17,911	15,656	611	1,33,689
III.—Confiscated drift and waif wood	...	67	38	8,642	116	84	819	3,230	61	35	26	13,118
IV.—Revenue from forests not managed by Government...	...	30	...	...	...	...	...	...	...	...	...	30
V.—Miscellaneous—												
(*a*) Fines and forfeitures.	...	...	...	16	63	...	37	...	...	...	...	116
(*b*) Refunds	607	601	9	65	210	239	338	226	142	11	155	2,603
(*c*) Other sources	5	1,481	435	279	910	187	1,310	327	371	987	189	6,481
Total, Receipts ...	612	23,292	8,857	81,657	93,892	87,400	1,34,654	79,326	33,021	22,560	41,339	6,06,610

MADRAS,
9th June 1890.

(Signed) G. HOMFRAY,
Ag. Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras, Northern Circle.

Summary of expenditure of the different districts, 1889-90.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godávari	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nilgiris.	Total.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
A.—Conservancy and Works.												
I.—Timber and other produce removed from the forests by Government Agency—												
(*a*) Timber ...	...	9,095	4	1,168	...	78	8,440	...	4	54	3,014	21,857
(*b*) Firewood and charcoal ...	...	2,714	153	...	175	17,223	91	8	1,556	126	15,358	37,404
(*c*) Bamboos ...	...	...	1	...	116	...	110	...	577	93	...	897
(*d*) Sandalwood ...	...	...	...	...	...	...	...	...	...	...	1,856	1,856
(*e*) Grass and other minor produce.	...	27	...	...	...	3,256	614	109	828	119	690	5,643
II.—Timber and other produce removed from the forests by consumers or purchasers ...	...	1,309	2,030	5,641	2,283	390	5,726	9,142	372	1,260	1,651	29,804
III.—Confiscated drift and waif wood ...	...	1,127	98	2,188	22	6	38	332	6	26	...	3,843
IV.—Revenue from forests not managed by Government ...	...	...	...	...	...	...	...	...	...	...	...	...
V.—Rent of leased forests, and payments to shareholders in forests managed by Government ...	...	...	...	...	...	...	...	...	10,000	...	3,500	13,500
VI.—Live stock, stores, tools and plant—												
(*a*) Purchase of cattle ..	...	...	...	...	...	...	16	...	...	...	...	16
(*b*) Feed and keep of cattle ...	...	...	...	2,373	...	...	...	...	...	...	1,427	3,800
(*c*) Stores, tools and plant ...	170	218	29	603	445	1,049	563	73	57	70	473	3,750
VII.—Communications and buildings—												
(*a*) Roads and bridges ...	...	1,445	...	1,209	1,025	...	1,635	1,595	812	7	2,024	9,752
(*b*) Buildings ...	...	2,158	16	1,954	2,108	574	1,653	2,544	596	469	1,350	13,422
(*c*) Other works ...	...	7	8	...	670	...	28	...	...	...	113	826
VIII.—Demarcation, improvement and extension of forests—												
(*a*) Demarcation ...	...	1,626	102	2,941	1,634	2,166	3,121	631	551	3,715	1,764	18,251
(*b*) Compensation for land and rights ...	2	...	...	705	2,626	244	761	180	235	323	50	5,126
(*c*) Surveys and working plans ...	771	544	3	652	119	362	126	63	950	20	133	3,743
(*d*) Plantations ..	98	660	6	648	2,636	4,154	2,020	278	347	799	7,399	19,045
(*e*) Protection from fire ...	...	925	225	476	722	936	5,214	694	3,227	1,362	2,779	16,560
(*f*) Other works ...	...	42	...	...	1,341	254	1,125	18	916	21	2,373	6,090
IX.—Miscellaneous—												
(*a*) Refunds ...	...	75	1	25	309	228	60	102	99	50	802	1,751
(*b*) Law charges ...	8	...	...	2	10	561	...	17	1	129	...	728
(*c*) Other charges.	203	54	7	29	107	27	54	284	37	26	21	849
Total A.—Conservancy and works	1,252	22,026	2,683	20,614	16,348	31,508	31,395	16,070	21,171	8,669	46,777	2,18,513

MADRAS,
9th June 1890.

(Signed) G. HOMFRAY,
Ag. Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras, Northern Circle.

Summary of expenditure of the different districts, 1889-90.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godávari	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nílgiris.	Total.
B.—"*Establishments.*"	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward, Total A. "Conservancy and Works."	1,252	22,026	2,683	20,614	16,348	31,508	31,395	16,070	21,171	8,669	46,777	2,18,513
I.—Salaries—												
(*a*) Conservators ...	15,370	...	...	...	...	...	...	...	...	...	...	15,370
(*b*) Superior officers ...	16,320	7,644	876	8,454	4,689	7,132	8,400	6,417	3,650	2,744	4,850	71,176
(*c*) Subordinate forest and depôt establishments.	2,385	4,626	2,489	7,360	7,629	6,533	10,522	8,187	4,409	5,084	7,868	67,087
(*d*) Office establishments.	14,424	1,794	950	1,598	1,725	2,335	2,421	2,306	1,185	1,097	2,096	31,931
(*e*) Deputation and special allowances ...	775	...	...	...	...	...	...	...	...	...	...	775
Famine batta ...	...	108	...	...	...	...	...	...	...	...	...	108
II.—Travelling allowances—												
(*a*) Conservators ...	4,720	...	...	...	...	...	...	...	...	...	...	4,720
(*b*) Superior officers ...	3,297	1,005	82	1,358	870	1,401	3,063	1,566	1,075	456	1,451	15,624
(*c*) Subordinate forest and depôt establishments	881	1,643	937	2,532	2,156	1,283	2,592	2,267	825	1,225	2,207	18,548
(*d*) Office establishments	2,147	342	261	330	567	271	422	372	134	246	47	5,139
III.—Contingencies—												
(*a*) Stationery ...	27	...	2	...	...	28	...	...	...	...	9	66
(*b*) Carriage of tents and records ...	609	164	68	130	296	175	128	45	72	154	...	1,841
(*c*) Rents, rates and taxes	...	250	50	180	91	...	20	7	160	42	...	800
(*d*) Pay of police guards	...	...	...	...	...	...	...	...	...	...	...	...
(*e*) Official postage ...	754	327	122	347	530	385	402	303	251	201	188	3,810
(*f*) Sundries	925	202	96	73	135	217	156	121	53	268	576	2,822
Total B. "Establishments" ...	62,634	18,105	5,933	22,362	18,688	19,760	28,126	21,591	11,814	11,517	19,287	2,39,817
Grand Total of expenditure ...	63,886	40,131	8,616	42,976	35,036	51,268	59,521	37,661	32,985	20,186	66,064	4,58,330

MADRAS,
9th June 1890.

(Signed) G. HOMFRAY,
Ag. Examiner of Forest Accounts.

ANNUAL FORM NO. 65.

Forest Department, Madras, Northern Circle.

Outstandings and Liabilities on account of Contractors and Disbursers for 1889-90.

District.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).
	RS. A. P.	RS. A. P.	RS. A P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Conservator of Forests, Northern Circle ...	...	1,624 1 5	1,624 1 5	5 4 4	1,652 9 5	1,657 13 9	33 12 4	...
Two-fifths of Examiner's office	...	541 4 0	541 4 0	4 11 5	845 9 4	850 4 9	309 0 9	...
Forest Settlement office, Nellore, &c.	...	344 8 0	344 8 0	19 0 0	340 0 0	359 0 0	14 8 0	...
Do. Kistna, Kurnool, &c.	...	.....	.....	.....	.....	.....	.....	...
Forest School, Dehra Dun.	...	.....	.....	.....	.....	.....	.....	...
Ganjam	...	40,366 8 3	40,366 8 3	3,069 0 1	41,156 2 10	44,225 2 11	3,858 10 8	...
Vizagapatam	...	6,598 4 0	6,598 4 0	646 11 4	6,315 2 11	6,961 14 3	363 10 3	...
Godávari	...	30,142 12 0	30,142 12 0	2,501 13 0	29,586 14 5	32,088 11 5	1,945 15 5	...
Kistna	...	26,269 2 0	26,269 2 0	1,094 2 8	25,856 11 6	26,950 14 2	681 12 2	...
Nellore	...	38,644 13 10	38,644 13 10	1,001 15 10	38,556 6 3	39,558 6 1	913 8 3	...
Cuddapah	...	40,418 15 2	40,418 15 2	507 3 3	40,192 3 0	40,699 6 3	280 7 1	...
Kurnool	...	14,930 2 2	14,930 2 2	711 10 8	14,771 12 2	15,483 6 10	553 4 8	...
Bellary	...	16,744 13 5	16,744 13 5	447 11 3	16,566 9 2	17,014 4 5	269 7 0	...
Anantapur	...	13,613 0 11	13,613 0 11	336 1 5	13,987 8 3	14,323 9 8	710 8 9	...
Nilgiris	...	19,843 0 4	19,843 0 4	1,278 4 6	20,013 11 5	21,291 15 11	1,448 15 7	...
Total ...	...	2,50,081 5 6	2,50,081 5 6	11,623 9 9	2,49,841 4 8	2,61,464 14 5	11,383 8 11	...

MADRAS,
10th June 1890.

(Signed) G. HOMFRAY,
Ag. Examiner of Forest Accounts.

ANNUAL FORM NO. 66.

Forest Department, Madras, Northern Circle.

Revenue received and Outstandings on account of Revenue during 1889-90.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Direction	Timber and other produce ...	.....	611 15 0	611 15 0	611 15 0	.....
Ganjam	Do. ...	431 10 4	32,842 10 0	33,274 4 4	23,291 7 10	9,982 12 6
Vizagapatam ...	Do. ...	.....	8,856 10 5	8,856 10 5	8,856 10 5	.....
Godávari	Do. ...	.....	81,662 10 10	81,662 10 10	81,656 9 10	6 1 0
Kistna	Do. ...	2,211 7 10	92,769 5 11	94,980 13 9	93,892 5 3	1,088 8 6
Nellore	Do. ...	70 11 3	87,329 8 2	87,400 3 5	87,400 3 5	.....
Cuddapah	Do. ...	63 1 10	1,35,183 2 11	1,35,246 4 9	1,34,654 4 0	592 0 9
Kurnool	Do. ...	.....	79,325 10 10	79,325 10 10	79,325 10 10	.....
Bellary	Do. ..	.....	34,189 9 3	34,189 9 3	33,021 3 3	1,168 6 0
Anantapur	Do. ...	.....	22,560 2 6	22,560 2 6	22,559 14 1	0 4 5
Nilgiris	Do. ...	1,033 0 6	40,479 13 9	41,512 14 3	41,339 11 1	173 3 2
	Total ...	3,809 15 9	6,15,811 3 7	6,19,621 3 4	6,06,609 15 0	13,011 4 4

MADRAS,
9th June 1890.

(Signed) G. HOMFRAY,
Ag. Examiner of Forest Accounts.

Annual Form No. 67.

Forest Department, Madras, Northern Circle.

Financial results of the year 1889-90.

District.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Ganjam	11,093	24,161	12,273	7,941	15,695	23,366	47,797
Vizagapatam	16	158	8,865	6,385	4,628	8,881	11,171
Godávari	1,973	5,099	79,758	23,005	22,539	81,731	50,643
Kistna	635	291	93,331	17,605	24,807	93,966	42,703
Nellore	46,209	32,052	41,265	5,881	21,002	87,474	58,935
Cuddapah	18,145	17,707	1,16,583	21,373	28,108	1,34,728	67,188
Kurnool	458	117	78,942	25,506	19,705	79,400	45,328
Bellary	3,346	4,657	29,723	13,735	19,703	33,069	38,095
Anantapur	1,164	392	21,444	9,859	15,045	22,608	25,296
Nilgiris	30,857	32,961	10,530	12,272	25,941	41,387	71,174
Total ...	1,13,896	1,17,595	4,92,714	1,43,562	1,97,173	6,06,610	4,58,330

Forest Department, Madras, Northern Circle.

Abstract of Form No. 68 shewing the number of trees felled by selection by Government Agency during the year 1889-90.

District.	Teak.	Sál.	Black or rose-wood.	Iron-wood.	Eucalyptus and Acacia.	Miscel-laneous.	Bamboos.	Total.
Balance at the end of the year 1888-89.	...	90	5	136	...	256	6,911	7,398
Ganjam	...	1,760	...	...	...	348	710	2,818
Vizagapatam	...	...	...	...	...	132	...	132
Godávari	...	...	...	352	...	210	...	562
Kistna	...	...	...	...	...	2,818	7,735	10,553
Nellore	...	...	...	...	...	...	...	...
Cuddapah	...	...	...	...	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...
Bellary	...	...	...	...	...	...	...	...
Anantapur	...	...	...	...	...	154	...	154
Nilgiris	347	...	9	...	20,225	212	...	20,793
Total ...	347	1,760	9	352	20,225	3,874	8,445	35,012
Conversion	275	1,668	3	352	20,225	3,846	710	27,079
Otherwise disposed of	...	50	...	...	...	...	7,735	7,785
Total ...	275	1,718	3	352	20,225	3,846	8,445	34,864
Balance on hand on the 31st March 1890.	72	132	11	136	...	284	6,911	7,546

Forest Department, Madras, Northern Circle.

Districtwar Abstract of Form 69 showing the collection of timber, &c., in the Northern Circle during the year 1889-90.

—	Timber.							Firewood and charcoal.	Bamboos.	Sandal-wood.	Minor produce.	Remarks.
	Teak.	Sál.	Red sanders.	Iron-wood.	Black-wood or rose-wood.	Miscel-laneous.	Total.					
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	MDS.	MDS.	
Stock of the circle at the beginning of the year	8,450	37,239	3,734	2,873	2,905	17,831½	73,032½	659,836	17,791	...	2,951½	
Ganjam	...	36,957	...	...	...	1,359	38,316	193,002	10,581	...	...	
Vizagapatam	...	...	...	...	...	132	132	813	300	...	...	
Godavari	190	...	...	1,350	...	2,910	4,450	...	...	...	...	
Kistna	...	...	...	...	...	...	...	6,265	7,735	...	4½	
Nellore	...	...	...	...	...	...	...	141,848	...	...	10,978	
Cuddapah	...	...	54,048	...	...	2,915	56,963	9,316	15,613	...	2,897	
Kurnool	...	...	...	...	...	...	...	2,200	...	...	613½	
Bellary	235	...	...	...	...	225	460	8,521	66,725	...	9,052½	
Anantapur	...	...	...	...	...	2,650	2,650	7,036	7,412	...	177½	
Nilgiris	7,890	...	...	...	396	8,681	16,967	482,706	...	* 1,762	1,583½	* 783 cubic feet.
Total actual new collection ...	8,315	36,957	54,048	1,350	396	18,872	119,938	851,707	108,366	* 1,762	25,306	
Collection by conversion ...	...	9,548	...	...	...	...	9,548	...	...	...	...	
Forest depot transfers ...	...	26,133	...	...	...	342	26,475	26,772	460	...	32½	
Total ...	8,315	72,638	54,048	1,350	396	19,214	155,961	878,479	108,826	* 1,762	25,338½	
Grand Total ...	16,765	109,877	57,782	4,223	3,301	37,045½	228,993½	1,538,315	126,617	* 1,762	28,293½	
Sold in the forests	4,392	476	1,637	270	1,046	8,081	15,902	285,201	88,394	† 1,666	15,007¾	† 740 cubic feet.
Disposal by conversion ...	...	19,757	...	...	...	...	19,757	...	...	...	...	
Removed to sale depots ...	...	12,069	48,942	1,614	...	6,762	69,387	241,091	19,815	...	11,768	
Forest depot transfers ...	...	26,133	...	...	...	342	26,475	26,772	460	...	32½	
Otherwise disposed of	767	11,152	1	57	778	3,820	16,575	114,697	4,495	...	630	
Total ...	5,159	69,587	50,580	1,941	1,824	19,005	148,096	667,761	113,164	† 1,666	27,438½	
Stock at the close of the year...	11,606	40,290	7,202	2,282	1,477	18,040½	80,897½	870,554	13,453	‡ 96	854¾	‡ 48 cubic feet.

Forest Department, Madras, Northern Circle.

Distribution Abstract of Form No. 70 shewing the Receipts and Issues of Timber and other Produce in Sale Depôts during the year 1889-90.

—	Timber.							Firewood and charcoal.	Bamboos.	Sandalwood.	Minor produce.
	Teak.	Sál.	Red sanders.	Iron-wood.	Black or rose-wood.	Miscel-laneous.	Total timber.				
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Stock on 1st April 1889 ...	...	20,348	109,794	...	74	3,725½	133,941½	89,147	...	...	3,037¾
Received from forests—											
Ganjam	...	12,069	...	...	...	107	12,176	30,609	7,695	...	...
Godávari	...	...	...	1,614	...	3,296	4,910	...	...	...	...
Kistna	...	...	...	...	...	...	...	...	7,500	...	...
Nellore	...	...	...	...	...	...	...	63,013	...	...	8,603¾
Cuddapah	...	...	48,942	...	...	2,513	51,455	420	283	...	3,034¼
Bellary	...	...	...	...	...	...	...	5,727	...	...	...
Anantapnr	...	...	...	...	...	...	...	...	4,337	...	130½
Nílgiris	...	...	...	...	...	846	846	141,322	...	...	...
Total ...	...	12,069	48,942	1,614	...	6,762	69,387	241,091	19,815	...	11,768½
Received from other sale depôts.	...	8,603	...	...	15	57	8,675	4,759	770	...	653¼
Received by conversion ...	...	6,167	...	971	...	113	7,251	3,083	...	...	...
Add quantity found in the depôt.	...	258	...	...	...	246½	504½	276	20	...	...
Total ...	...	27,097	48,942	2,585	15	7,178½	85,817½	249,209	20,605	...	12,421¾
Grand Total ...	...	47,445	158,736	2,585	89	10,904	219,759	338,356	20,605	...	15,459½
Sold from depôt	...	25,056	68,358	669	28	7,017	101,128	264,612	18,925	...	10,317¾
Removed to other sale depôts.	...	8,603	...	...	15	57	8,675	4,759	770	...	653¼
Disposal by conversion ...	...	7,444	...	1,305	...	377	9,126	...	...	...	...
Otherwise disposed of ...	...	2,142	...	307	...	184	2,633	13,920	872	...	479
Total disposals ...	...	43,245	68,358	2,281	43	7,635	121,562	283,291	20,567	...	11,450
Balance in depôts on 31st March 1890.	...	4,200	90,378	304	46	3,269	98,197	55,065	38	...	4,009½

Forest Department, Madras, Northern Circle.

Abstract of Form No. 71 shewing sales of Timber and other Produce both in the Depôt and the Forest during the year 1889-90.

District.	Timber.														Firewood and charcoal.		Bamboos.		Sandal-wood.		Minor produce.	
	Teak.		Sál.		Red sanders.		Iron-wood.		Black or rosewood.		Miscellaneous.		Total.									
	Depot.	Local.	Depot.	Local.	Depot.	Local.	Depot.	Local.	Depot.	Local.	Depot.	Local.	Depot.	Local.	Depot.	Local.	Depot.	Local.	Depot.	Local.	Depot.	Local.
1	2		3		4		5		6		7		8		9		10		11		12	
	C.FT.	C. FT.	C. FT.	C.FT.	C. FT.	C. FT.	C.FT.	C.FT.	C.FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	No.	NO.	C.FT.	C.FT.	MDS.	MDS.
Ganjam ...	...	...	25,056	476	...	...	...	...	28	...	179	...	25,263	476	22,222	100	6,805	870	...	...	...	...
Vizagapatam ...	...	...	...	...	...	...	...	...	...	...	...	132	...	132	...	18	...	300	...	...	...	...
Godávari ...	...	190	...	...	...	...	669	270	...	...	3,296	...	3,965	460	...	...	...	...	...	...	...	4½
Kistna ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4,435	7,500	...	...	...	...	3,290¾
Nellore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	115,560	137,669	...	...	...	...	8,435¾	632¾
Cuddapah ...	...	5	...	...	68,358	1,637	...	...	...	...	2,564	752	70,922	2,394	420	11,606	283	17,424	...	...	1,581¼	816
Kurnool ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	40	...	...	...	...	...	9,045
Bellary ...	...	..	...	...	...	...	...	...	...	...	...	225	...	225	4,864	8,763	...	66,725	...	...	...	47
Anantapur ...	...	...	...	...	...	...	...	...	...	...	...	1,000	...	1,000	...	7,036	4,337	3,075	...	...	300½	1,741¾
Nilgiris ...	...	4,197	...	...	...	...	...	...	...	1,046	978	5,972	978	11,215	121,546	115,534	...	...	...	740	...	
Total ...	...	4,392	25,056	476	68,358	1,637	669	270	28	1,046	7,017	8,081	101,128	15,902	264,612	285,201	18,925	88,394	...	740	10,317¾	15,007¾

District.	Value of sale.										Total.		Remarks.
	I (*a.*) Timber.		I (*b.*) Firewood.		I (*c.*) Bamboos.		I (*d.*) Sandal-wood.		I (*e.*) Minor produce.				
	Amount of sale.	Amount actually paid.	Amount of sale.	Amount actually paid.	Amount of sale.	Amount actually paid.	Amount of sale.	Amount actually paid.	Amount of sale.	Amount actually paid.	Amount of sale.	Amount actually paid.	
	13		14		15		16		17		18		19
	RS.	RS.	RS.	RS	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
Ganjam ...	19,525	9,939	995	995	159	159	...	...	...	...	20,679	11,093	
Vizagapatam ...	7	7	7	7	2	2	...	...	...	...	16	16	
Godávari ...	1,980	1,973	...	...	...	...	...	...	...	...	1,980	1,973	Abstract of amount realized.
Kistna ...	...	...	619	514	120	120	...	...	1	1	740	635	RS.
Nellore ...	...	71	37,827	37,827	...	...	...	...	8,311	8,311	46,138	46,209	I (*a*) 34,870
Cuddapah ...	16,989	16,782	280	280	349	349	...	...	841	734	18,459	18,145	I (*b*) 59,232
Kurnool ...	...	...	1	1	...	...	...	...	456	456	457	457	I (*c*) 2,745
Bellary ...	33	33	1,378	1,378	1,935	1,935	...	...	1,023	...	4,369	3,346	I (*d*) 5,616
Anantapur ...	117	117	288	288	180	180	...	...	579	579	1,164	1,164	I (*e*) 11,433
Nilgiris ...	4,948	5,948	18,079	17,941	...	...	5,616	5,616	1,355	1,352	29,998	30,857	Total ... 1,13,896
Total ...	43,599	34,870	59,474	59,232	2,745	2,745	5,616¾	5,616	12,566	11,433	1,24,000	1,13,896	
											Add outstandings due from previous year, as per form No. 66 ...	1,526	...
											Total ...	1,25,526	1,13,896
											Deduct amount realized during the year ...	1,13,896	...
											Balance outstanding on 31st March 1890, as per form No. 66 ...	11,630	...

Forest Department, Madras, Northern Circle.

Abstract of Form No. 72-A—Timber and other produce cut, collected and removed from the forests by consumers or purchasers, including pasture, during the year 1889-90.

District.	Timber.	Firewood.				Bamboos.	Minor produce.
		Firewood.	Railway fuel.	Charcoal.	Total.		
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	MDS.
Ganjam	1,280	704,764	...	3,684	708,448	120,327	...
Vizagapatam	25,581	233,995	...	92,360	326,355	269,916	4,578
Godávari	279,304	342,268	...	4,888	347,156	2,593,105	369,981
Kistna	267,946	649,447	...	779	650,226	269,055	222,705
Nellore	67,156	28,802	...	20	28,822	6,143	831,345
Cuddapah	407,106	1,137,998	357,816	5,680	1,501,494	1,061,550	184,872
Kurnool	331,880	332,740	238,416	7,720	578,876	2,492,250	39,465
Bellary	37,860	163,638	...	6,696	170,334	3,648	69,899
Anantapur	20,713	89,905	...	...	89,905	...	138,135
Nílgiris	18,190	26,840	...	1,310	28,150	222,410	91,838
Total ...	1,457,016	3,710,397	596,232	123,137	4,429,766	7,038,404	1,952,818

	Sales.	Actually realized.
	RS.	RS.
II. (*a*) Timber	1,25,594	1,25,566
(*b*) Firewood and charcoal	82,292	82,327
(*c*) Bamboos	49,315	49,314
(*d*) Grazing and fodder grass	78,327	79,470
(*e*) Other minor produce	1,33,835	1,33,689
Total ...	4,69,363	4,70,366
Add outstandings due from previous year as per form No. 66	2,268	
Total ...	4,71,631	
Deduct amount realized during the year	4,70,366	
Balance outstanding on 31st March 1890 as per form No. 66	1,265	

Forest Department, Madras, Northern Circle.

Abstract of Form No. 72-B—Timber and other Produce confiscated and sold during the year 1889-90.

ABSTRACT.

District.	Timber.		Firewood.				Bamboos.		Minor produce.		Total revenue.
			Firewood.		Charcoal.						
	Quantity.	Value received.	Quantity.	Value received.	Quantity.	Value received.	Quantity.	Value received.	Quantity.	Value received.	
	C.FT.	RS.	C.FT.	RS.	C.FT.	RS.	NO.	RS.	MDS.	RS.	RS.
Ganjam ...	206	62	85	3	6	1	...	...	23	1	67
Vizagapatam.	152	38	...	...	...	...	...	...	...	...	38
Godávari ...	26,071	8,216	7,368	330	8	1	5,590	79	44	16	8,642
Kistna ...	553	65	123	11	...	...	4,675	31	1,210	9	116
Nellore ...	585	43	...	...	...	...	9	1	5,400	40	84
Cuddapah ...	2,069	600	7,154	187	3	2	1,510	9	113	21	819
Kurnool ...	60,980	3,049	10,080	126	...	...	6,000	50	225	5	3,230
Bellary ...	280	14	3,200	40	...	...	...	...	182	7	61
Anantapur ...	...	...	695	19	...	...	...	...	300	16	35
Nílgiris ...	...	...	43	5	648	20	100	1	...	...	26
Total ...	90,896	12,087	28,748	721	665	24	17,884	171	7,497	115	13,118

Annual Form No. 73-A.

Forest Department, Madras, Northern Circle.

Abstract shewing the value of timber and other produce at sale depôts, for the year 1889-90.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.		Remarks.
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.	
				Rs.			Rs.	Rs.	Rs.	
Ganjam ...	Sál logs	478	3,278	1,383	225	2,061	674	...	709	
	Do. sleepers	8,186	16,796	11,901	468	2,086	365	...	11,536	
	Do. scantlings	66	89	26	...	...	...	...	26	
	Do. rafters	263	171	90	71	39	5	...	85	
	Do. slabs	6,339	...	127	13,184	...	232	105	...	
	Do. planks	27	14	1	27	14	1	...	...	
	Piasál logs	6	49	22	9	100	34	12	...	
	Blackwood logs	3	28	9	...	...	...	...	9	
	Miscellaneous logs ...	231	2,979	621	176	2,574	468	...	153	
	Satinwood	36	357	158	29	318	145	...	13	
	Ebony	3	46	21	3	46	21	...	...	
	Firewood and charcoal ...	Tons 22½	1,575	10	...	13,047	25	15	...	
	Minor produce	Mds. 40	...	5	...	...	...	...	5	
	Bamboos	...	...	...	38	...	1	1	...	
	Total ...	...	...	14,374	...	...	1,971	...	12,403	
Godávari ...	Sleepers	...	...	...	228	304	456	456	...	
	Total ...	...	...	...	...	...	456	456	...	
Nellore ...	Casuarina pole	1	2	1	1	2	1	...	...	
	Junglewood firewood ...	799,865	55,440	9,691	98,194	1,266	572	...	9,119	
	Sulli bundles	16,772	7,454	*2,097	8,058	3,581	1,259	...	838	* The difference of Rs. 6,516 is owing to the wrong calculation of the number of sulli bundles and consequently to the wrong valuation.
	Rattans	10	Mds. 30	58	66	Mds. 198	380	322	...	
	Casuarina wood	...	...	...	Tons 125	5,000	625	625	...	
	Total ...	...	...	*11,847	...	...	2,837	...	9,010	
Cuddapah.	Redwood roots and stumps	Tons 2,286	109,794	22,860	Tns. 1,883	90,378	23,196	336	...	
	Thamba slabs	50	50	38	...	...	...	...	38	
	Minor produce	Mds. 2,771	...	1,099	Mds. 3,810½	...	1,356	257	...	
	Total ...	...	...	23,997	...	...	24,552	555	...	
Bellary ...	Fuel	Tons 34½	†2,380	42	26	1,794	190	148	...	† C. ft. 3,939 was an error.
	Total ...	...	...	42	...	...	190	148	...	
Anantapur...	Minor produce	Mds. 174¾	...	380	Md. 1	...	3	...	377	
	Total ...	...	...	380	...	...	3	...	377	
Nílgiris ...	Acacia planks and rafters.	372	191	253	4	4	3	...	250	
	Drag poles	98	98	12	271	271	34	22	...	
	Firewood and charcoal ...	294	22,296	2,268	‡576¾	30,377	2,429	161	...	‡ Lots. Bags. 276¾ 300
	Minor produce	Mds. 22	...	14	...	...	...	...	14	
	Total ...	...	...	2,547	...	...	2,466	...	81	
	Grand Total ...	...	...	§ 53,187	...	...	32,475	...	20,712	§ For the difference of Rs. 6,516. *Vide* explanation against the Nellore District.

ANNUAL FORM No. 73-B.

Forest Department, Madras, Northern Circle.

Abstract showing the value of Live-stock, Stores, Tools and Plant for the year 1889-90.

District.	Description of stock.	On hand at commencement of the year.		On hand at end of the year.		Difference in value.		Remarks.
		Number.	Value.	Number.	Value.	In favor of the year.	Against the year.	
			Rs.		Rs.	Rs.	Rs.	
Direction ...	Surveying and other instruments.	16	193	19	193	...	...	
	Furniture	78	980	80	1,004	...	...	
	Letter-weighing scales with weights.	2	108	2	108	...	...	
	Miscellaneous	4	52	8	57	...	...	
	Total ...	100	1,333	109	1,362	29	...	
Ganjam ...	Rest or inspection houses	*7	3,705	7	5,433	...	...	* Russelkonda, Berhampore, Gullery, Hatiguda, Ramba, Tilsingi, and Chondorgiri.
	Range houses	3	2,265	†3	1,590	...	...	† Gayagonda, Mojjagodo, and Surada.
	Guards' and tannah huts.	16	1,013	16	953	...	...	
	Furniture	35	263	46	365	...	...	
	Tools	192	240	200	319	...	...	
	Surveying and other instruments.	26	436	26	434	...	...	
	Letter-weighing scales.	...	...	1	34	...	...	
	Miscellaneous	2	20	3	43	...	...	
	Total ...	281	7,942	302	9,171	1,229	...	
Vizagapatam.	Surveying and other instruments.	10	23	10	23	...	...	
	Tools	16	...	16	...	...	...	
	Furniture	20	97	‡22	97	...	...	‡ Cost of 2 medicine chests not known.
	Miscellaneous	1	12	1	12	...	...	
	Total ...	47	132	49	132	...	...	
Godávari ...	Rest or inspection house.	1	327	§3	2,100	...	...	§ Rekapalli, Murmur, & Jirigudda.
	Range house	...	...	‖1	350	...	...	‖ Marrigudem.
	Depôt and office sheds ...	1	27	8	236	...	...	
	Guards' and tannah huts.	10	117	10	97	...	...	
	Surveying and other instruments.	22	169	32	385	...	...	
	Tools	441	423	458	441	...	...	
	Furniture	55	496	61	496	...	...	
	Miscellaneous	71	393	120	651	...	...	
	Boat	1	1,500	1	1,500	...	...	
	Scales with tripods ...	3	413	3	413	...	...	
	Elephants	4	6,000	4	6,000	...	...	
	Total ...	609	9,865	701	12,669	2,804	...	
Kistna ...	Rest or inspection house.	1	792	3	3,010	...	...	Kondapalli, Kondavid, and Remedicherla.
	Guards' and tannah huts.	...	...	10	266	...	...	
	Surveying and other instruments.	29	575	39	656	...	...	
	Tools	266	164	298	147	...	...	
	Furniture	34	298	41	354	...	...	
	Boats (staff)	1	2,280	1	2,420	...	...	
	Dingies	2		5		...	...	
	Letter-weighing scales...	1	2	1	2	...	...	
	Miscellaneous	...	...	1	23	...	...	
	Total ...	334	4,111	399	6,878	2,767	...	

Abstract showing the value of Live-stock, Stores, Tools and Plant for the year 1889-90—*cont.*

District.	Description of stock.	On hand at commencement of the year.		On hand at end of the year.		Difference in value.		Remarks.
		Number.	Value.	Number.	Value.	In favor of the year.	Against the year.	
			Rs.		Rs.	Rs.	Rs.	
Nellore ...	Rest or inspection house.	1	553	1	1,150	...	...	Udayagiri.
	Guards' and tannah huts.	7	...	*4	...	...	...	* Cost not given, 3 fallen down.
	Surveying and other instruments.	46	275	45	271	...	...	
	Tools	413	342	382	331	...	...	
	Furniture	96	574	91	407	...	...	
	Scales and weights, sets.	7	744	7	744	...	...	
	Cash safes	4	210	4	210	...	...	
	Boxes	19	30	18	28	...	...	
	Boats	11	4,478	11	4,478	...	...	
	Tramway	8½	32,644	8½	31,338	...	...	
	Miscellaneous	1	12	2	35	...	...	
	Total ...	613½	39,862	573½	38,992	...	870	
Cuddapah ...	Rest or inspection house.	5	10,400	†6	11,240	...	...	† Kodur, Sanipaya, Balapalle, Mogilipenta, Horsleykonda, and Vontimetta.
	Range houses	7	3,368	‡5	2,920	...	...	‡ Rayachoti, Sidhout, Rajampet, Badvél, and Kodur.
	Depôt and office sheds ...	1	190	4	670	...	...	
	Guards' and tannah huts.	83	1,495	§81	1,463	...	...	§ 10 destroyed and 8 newly built.
	Surveying and other instruments.	28	328	41	381	...	...	
	Tools	532	638	360	579	...	...	
	Furniture	68	526	81	515	...	...	
	Scales and weights ...	4	226	7	565	...	...	
	Buffaloes	...	...	2	32	...	...	
	Total ...	728	17,171	587	18,365	1,194	...	
Kurnool ...	Bungalow, head-quarters	¶1	11,000	1	11,000	...	...	
	Rest or inspection houses	15	4,919	‖4	4,700	...	...	‖ Rollapenta, Bainuti, Mantrala, and Buswapur.
	Range houses	3	490	2	550	...	...	Dornal, Kistnamchettipalle; one range house sold during the year.
	Guards' and tannah huts.	20	498	31	2,084	...	...	
	Surveying and other instruments.	30	281	35	339	...	...	
	Tools	612	1,065	614	1,083	...	...	
	Furniture	34	190	39	206	...	...	
	Cash chest	1	8	1	8	...	...	
	Scales with weights ...	1	20	1	10	...	...	
	Total ...	717	18,471	728	19,980	1,509	...	
Bellary ...	Range house	...	...	1	561	...	...	Range house at Sandûr partly built.
	Rest or inspection house.	1	634	1	500	...	...	
	Guards' and tannah huts.	...	...	3	35	...	...	
	Surveying and other instruments.	23	142	25	253	...	...	
	Tools	229	210	230½	236	...	...	
	Furniture	33	354	37	319	...	...	
	Scales with weights ...	1	272	3	248	...	...	
	Letter-weighing scales.	...	...	1	15	...	...	
	Miscellaneous	...	...	1	23	...	...	
	Total ...	287	1,612	302½	2,190	578	...	
Anantapur ...	Head-quarters bungalow, with out-house.	1	6,500	1	6,991	...	...	
	Rest or inspection houses	...	...	2	5,800	...	...	Gollah, Konapanainapalle.
	Guards' and tannah huts.	16	196	15	79	...	...	One shed collapsed.
	Surveying and other instruments.	42	186	43	142	...	...	
	Tools	145	281	148	276	...	...	
	Furniture	47	397	61	375	...	...	

¶ Twelve huts wrongly included under this head are now shown under "Guards' and tannah huts."

Abstract showing the value of Live-stock, Stores, Tools and Plant for the year 1889-90—*cont.*

District.	Description of work.	On hand at commencement of the year.		On hand at end of the year.		Difference in value.		Remarks.
		Number.	Value.	Number.	Value.	In favor of the year.	Against the year.	
			Rs.		Rs.	Rs.	Rs.	
Anantapur—*cont.*	Cash safe with padlock.	6	52	6	52	...	...	
	Scales with weights ...	5	375	*4	200	...	...	* One was sold for arrears of Local Fund tax on depôt
	Miscellaneous	...	...	1	23	...	...	
	Total ...	262	7,987	281	13,938	5,951	...	
Nilgiris ...	Rest or inspection house.	1	1,000	†2	1,860	...	...	† Kullar and Rallia.
	Range house	3	600	5	970	...	...	
	Guards' and tannah huts.	43	2,550	43	2,415	...	...	
	Surveying and other instruments.	35	278	35	235	...	...	
	Charcoal kiln	1	437	2	545	...	...	
	Furniture	45	483	59	590	...	...	
	Tools	767	1,327	780	1,440	...	...	
	Elephants	2	1,800	2	1,600	...	...	
	Do. calf	2	700	3	1,100	...	...	
	Miscellaneous.							
	Chains of elephants ...	8	180	8	160	...	...	
	Total ...	907	9,355	939	10,915	1,560	...	
	Grand Total ...	4,885½	1,17,841	4,971	1,34,592	16,751	...	

ANNUAL FORM No. 74.

Forest Department, Madras.

Statement of Elephants in Northern Circle during the year 1889-90.

PART I.

Elephants in possession of the Reporting Officers throughout the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep including servants and food.				Remarks.
					RS.	A. P.	
Godávari.	Bada moti guz	Purchased in July 1888.	Average per month.		49	7 0	
	Pown guz	Do. do. ...	Do.	do. ...	49	7 0	
	Captain Gunning ...	Do. do. ...	Do.	do. ...	49	7 0	
	Jung Bahadúr	Do. do. ...	Do.	do. ...	49	7 0	Total expenditure Rs. 2,373 for 12 months.
Nílgiris ...	Lutchmi	Transferred from the Anamalais in January 1882.	April	1889 ...	128	3 3	
	Chinna Lutchmi ...		May	do. ...	125	0 0	
	Mabu Baksh	Born in January 1885...	June	do. ...	55	0 0	
	Akbar Baksh	Born in February 1888.	July	do. ...	223	0 0	
			August	do. ...	102	0 0	
			September	do. ...	104	0 0	
			October	do. ...	118	12 0	
			November	do. ...	76	7 0	
			December	do. ...	59	4 0	
			January	1890 ...	89	8 0	
			February	do. ...	58	0 0	
			March	do. ...	288	0 0	Total expenditure Rs. 1,427-2-3 for 12 months.

PART II.

Elephants received in the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of keep including servants and food.		Remarks.
Nílgiris ...	Meenatchi	Born in April 1889 ...	...	...	

PART III.

Elephants gone off the list during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of keep including servants and food.	How disposed of.
		Nil.		

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—again the following G.O., dated 11th June 1890, No. 3583, Mis., Revenue :—

Read—the following Proceedings of the Board of Revenue (Land Revenue), dated 10th May 1890, No. 263, Forest :—

Read—the following letter from Lieutenant-Colonel J. R. McCULLAGH, R.E., Deputy Superintendent, Survey of India, in charge of No. 19 Party, to the Secretary to the Commissioners of Land Revenue, dated Ootacamund, 25th April 1890, No. 686-M. :—

With reference to the Proceedings of the Board of Revenue, dated the 7th of February 1890, Forest No. 70, paragraph 6, in which I am directed to "furnish a brief report showing the amount of work done and such details of cost as are available, together with a forecast of the outturn for the present year," I have the honor to submit a copy of the "Précis of the Annual Report for the field season 1888-89" (as submitted to the Surveyor-General), together with a tabular statement showing the distribution of cost, which, I trust, will afford the information required.

2. I also beg to submit the approximate outturn for the field season 1889-90 with an index map.

ENCLOSURE No. 1.

PRECIS of the Annual Report for the field season, 1888-89.

The Party took the field during the first week in November 1888 to undertake, in accordance with the programme detailed in the last report, the survey of the forest reserves situated in the three districts—Salem, Madura and Tinnevelly, and for this purpose a section of the Party was told off for each district. The work of the Salem section was restricted to triangulation and traversing, as this district was being entered for the first time, whereas the work of the other two sections included topography, traversing and some supplementary triangulation, owing to that previously executed (for the 1-inch survey) not being sufficiently close for the topography on the 4-inch scale, which is that adopted for the maps of the forest reserves.

2. The strength of the party was as under, viz. :—

Major J. R. McCullagh, R.E., Deputy Superintendent, 3rd grade, in charge.
Mr. C. F. Hamer, Surveyor, 3rd grade.
„ H. Todd, Surveyor, 4th grade.
„ R. Todd, Assistant Surveyor, 1st grade.
„ R. W. Senior, Assistant Surveyor, 2nd grade, up to the 14th April 1889.
„ T. J. J. Mills, Assistant Surveyor, 2nd grade.

T. Raghava Aiyangar,	Sub-Surveyor.	
V. Tiruvenkatasami,	do.	
Lachman D. Jadow,	do.	
Balaji Dhondiba,	do.	
V. L. Govindaraju Mudaliar,	do.	
P. Ramasami Naidu,	do.	
P. S. Ramaiyangar,	do.	resigned.
Ananta Row Dhondiba,	do.	
M. Gangaiah Naidu,	do.	

Fourteen Apprentices, of whom only 5 are now on the strength of the Party.
P. T. Strinivasulu, Writer.
J. N. David, Hospital Assistant.

3. The country embraced by the new triangulation is the southern part of the Salem district, but here as well as in other parts of the country the reserves are much scattered which necessitated a good deal of judgment in the laying out of the triangles so as to economise stations as much as possible where not wanted except to preserve the connection, and yet have sufficient to obtain the maximum number of points in and around the reserves. This triangulation is based on the sides of the Great Arc series, and has an area of 1,000 square miles obtained by observations at 53 stations from which 360 points and 333 heights were obtained.

The supplementary triangulation, the area of which has already been taken into account, includes observations at 42 stations; by which 176 new points were fixed and 162 new heights determined.

4. The traverses surveyed this season aggregate 240·3 linear miles and include the boundaries of the reserves surveyed in detail, as well as advance work. In connection with this part of the operations considerable difficulties were experienced owing to faulty demarcation and the lines not being cleared in time which entailed constant stoppages; the physical difficulties also were in some cases enormous owing to the differences of level which had to be surmounted, in one instance the line having to be carried over a rise of nearly 6,000 feet in a distance of about 3 miles.

5. The area topographically surveyed on the 4-inch scale covers 168·4 square miles, but the smallness of the outturn is to be attributed to the following causes, viz. :—

(*a*) The very wet and unfavorable weather which prevailed just as the Party took the field, lasting for about two months.
(*b*) The amount of sickness which existed amongst the establishment.
(*c*) The extreme difficulty of the ground to be surveyed, and the boundaries not being clear sufficiently in advance.
(*d*) The weakness of the Party in Sub-surveyors, and the loss of working-power consequent on the assistants and trained men being hampered with the instruction of Apprentices.

Moreover the circumstances of the operations having to be carried on in forests or where forest growth continually obstructed the view, caused the work to be painfully slow and arduous.

6. In consequence of the Party having suffered very severely the previous year from staying out later than was prudent, and March, April and May being notoriously unhealthy and very feverish months in the forest tracts, a recommendation was made to alter somewhat the ordinary dates of opening and closing of the operations by advancing the time of taking the field from the 1st November to the 1st September, and this arrangement having been approved, the operations were closed by the end of March, which saved the health of the establishment to some extent compared with the previous year, though there was still a large amount of sickness experienced towards the end, particularly in the Tinnevelly section.

7. During the recess the computations have been brought up to date and the fair maps of four reserved forests in Madura have been completed, namely, No. 47 Mudimalai, No. 65 Pillayar Nattam, No. 67 Alagarmalai, No. 78 Vikkramangalam. A large reserved forest in Tinnevelly has, however, not been fair mapped; it has been held over till the survey of the adjoining "reserved land" is finished as the whole will eventually form one reserve, and it will be more convenient, as well as a saving of labor and expense, to have one complete map of the whole instead of two. In addition to the regular mapping, traces of the reserves had to be prepared at the request of the Forest Department and with the approval of the Board of Revenue, which, on completion, were passed on to the District Forest-officers for the verification of boundaries, rights of way, holdings, &c., &c., and final numbering of pillars, so as to guard against any omissions, and to avoid any errors in respect to these items creeping into the fair maps. This process though adding considerably to the work in office is no doubt necessary where demarcation is as defective as has been found to be the case so far, and when surveyors have to trust very much to their own judgment aided only by the information obtained from Forest Guards and Watchers whose ideas of minute accuracy as to boundaries are sometimes of the vaguest.

8. During the field season as well as in recess the assistants worked hard and gave satisfaction, the three section officers, Messrs. Hamer, H. Todd and R. Todd, likewise Mr. Mills, being deserving of special mention. The Sub-surveyors on the whole, and when not incapacitated by illness, also did well, amongst whom Raghava Aiyangar, Lachman Jadow, Balaji Dhondiba, Ramasami Naidu, and Ananta Row Dhondiba are most deserving of mention; but the Apprentices, with a few exceptions, have turned out badly and gave hardly any return for the time, labor, and money spent on them.

9. During the coming field season the Party resumes operations in the districts of Salem, Madura and Tinnevelly.

OOTACAMUND,
20th September 1889.

(Signed) J. R. McCULLAGH, Major, R.E.,
Deputy Superintendent, Survey of India,
In charge, No. 19 Party.

ENCLOSURE No. 2.

SURVEY OF INDIA DEPARTMENT.

No. 19 PARTY (TOPOGRAPHICAL BRANCH), FROM 1st OCTOBER 1888 TO 31ST AUGUST 1889.

Season, 1888-89.

TABLE showing distribution of charges among different descriptions of survey, and the cost rate of each description.

Description of survey.	Totals of monthly allotments to sections.	Shares of charges for general section.	Shares of pay and travelling allowances of Deputy Superintendent and Assistant Superintendent.	Special contingent charges.	Shares of general contingent charges.	Total.	Areas.	Cost rates.	Remarks—Triangulation; Traversing.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	SQ. MLS.	RS. A. P.	
Traversing and triangulation for Forest Department.	17,574 7 3	3,105 6 10	8,996 12 2	..	3,722 13 0	33,399 7 3	1,144 0 240 0	24 2 1	This statement shows expenditure for eleven months only from 1st October 1888 to 31st August 1889, the survey year of the Party having been altered so as to run from 1st September—*vide* Surveyor-General's letter No. 445-S, dated the 11th February 1889.
Detail survey on 4-inch scale for Forest Department.	12,212 0 8	2,157 14 1	6,251 9 10	..	2,586 14 3	23,208 6 10	168 4	137 13 1	
Total ..	29,786 7 11	5,263 4 11	15,248 6 0	..	6,309 11 3	56,607 14 1	..	..	

ENCLOSURE No. 3.

SURVEY OF INDIA DEPARTMENT.

APPROXIMATE outturn of No. 19 Party (Survey of India), for season 1889-90, or from 1st September 1889 to end of field season 1890, with estimate of cost to 31st August 1890.

Designation of Survey Party and name of officer in charge.	District, Pargana, or other Sub-division.	Triangulation.	Traversing.	Approximate completed area in square miles.	Actual cost for six months ending 28th February including contingencies.	Probable cost for six months ending 31st August including contingencies.	Approximate area remaining for survey.	Remarks.
		SQ. MLS.	LR. MLS.	SQ. MLS. Surveyed on 4-inch scale.	RS. A. P.	RS. A. P.	About 13,600 square miles.	*On maps of previous surveys used as guides to boundaries.* The maps of the Madras Survey wherever available have been consulted.
No. 19 Party, Survey of India (Madras Forest), Lieutenant-Colonel J. R. McCullagh, R.E., Deputy Superintendent.	Salem	710	288·4	..	..	..		*On demarcations in the field.* At the commencement of the field season there was some trouble in Madura and to a less extent in Salem owing to boundaries not being sufficiently cleared and demarcated, but there was subsequently considerable improvement as the work went on. In Tinnevelly the arrangements were very good and little or no difficulty was experienced.
	Madura	472	150·2	78·0	..	..		
	Tinnevelly	..	190·1	133·4 Reserved forests topographically.	..	..		
Total of Approximate ..	Outturn	1,182	628·7	211·4	43,637 4 7	*24,560 9 10		*General.* The outturn of topography, though a slight improvement on last year, is still a good deal under what was expected; but this is in a great measure due to the number of hands that have to be employed on the traverses, the time occupied in surveying the boundaries being very great owing to the difficulties of the ground. The work in the Palnis was greatly retarded owing to unfavorable weather during nearly the whole season. There was a good deal of sickness, one apprentice died and three absconded, thus weakening still more an establishment which is already very weak in Sub-surveyors, especially in experienced ones, and though every effort is being made to keep up the strength, it is with the utmost difficulty men can be obtained willing to face work in the forests and hills.
		SQ. MLS.						
Approximate area prepared in advance.	Triangulated ..	1,010	..	..	..	..		
		LR. MLS.						
	Traversed	328	..	..	..	..		

* This is the actual and probable expenditure for the survey year, viz., from 1st September 1889 to 31st August 1890.

N.B.—To be accompanied with Index Map of season's operations, and to be submitted at the close of the field season.

ENCLOSURE No. 4.—Index Map.

Resolution—dated 10th May 1890, No. 263, Forest.

Submitted to Government, with reference to paragraph 7 of G.O., dated 13th December 1889, No. 989.

(True Copies and Extract.)

(Signed) M. HAMMICK,
Secretary.

To the Secretary to Government, Revenue Department,
with an Index Map.

Copy to the Conservator of Forests, Southern Circle.
" " Deputy Superintendent, Survey of India,
in charge, No. 19 Party.
" " Conservator of Forests, Northern Circle.
" " Examiner of Forest Accounts.

Order—dated 11th June 1890, No. 3583, Mis., Revenue.

Recorded.

2. The explanation called for from the Surveyor-General of India in Board's Proceedings, dated the 29th January last, Forest No. 97, Mis., is awaited.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

To the Commissioners of Land Revenue.

READ—also the following Proceedings of the Board of Revenue (Land Revenue), dated 6th September 1890, No. 545, Forest:—

MR. W. S. WHITESIDE.

Read—the following letter from A. W. PEET, Esq., Acting Conservator of Forests, Northern Circle, to the Secretary to the Commissioners of Land Revenue, dated Madras, 31st July 1890, No. 1136:—

I have the honor to send the annual Administration Report for the Northern Circle for the year 1889-90. An attempt has been made to simplify the returns, and abstracts of all the forms have been made out.

2. In order to attempt to meet the wishes of Government and make the report less bulky, it was agreed, in consultation, to give in detail in print this year only such forms as it seemed necessary to give in detail; and to give the rest in abstract.

3. In order to allow for check, however, the detailed figures are to be sent in manuscript for the information of the Board and Government, just as they would have been sent to the press. There is no saving of work in the Circle offices, but there is a saving of time and expense in printing, and a reduction in the bulk of the report. As a matter of fact this year all the detailed forms for this Circle were printed before these proposals were settled.

4. In accordance with these proposals forms Nos. 59-A, 59-B, 59-C, 59-D, 59-E, 60, 61, 62, 63, 64, 65, 66, 67 and 74 are given in detail, and the rest in abstract.

ENCLOSURE No. 1.—Administration Report for 1889-90.

ENCLOSURES Nos. 2, 3 AND 4.—Sketch-maps.

Read—the following letter from Colonel I. CAMPBELL WALKER, Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue, dated Madras, 15th August 1890, No. 1313:—

I have the honor to submit herewith the annual report (in print complete) on the Forest Administration of this Circle during 1889-90, and to request that the proof copy already supplied may be returned.

2. I regret to have to state that none of the district reports, except those from North Coimbatore and South Malabar, were received on the due date, viz., 15th May. The reports from South Arcot and Salem were about a week and that from South Canara three weeks late. Supplemental statements and returns continued to be received up to the end of June. The work in my office had therefore to be done as usual at very high pressure in view to begin printing on the 15th July, on which date the report is due with the Board in *manuscript*. If the Board wish to have the report *in print* on the 1st August as would appear from its Proceedings of the 11th instant, the district reports should reach me not later than the 1st May, and Code paragraph 247 would have to be amended accordingly by the Code Committee, subject to the approval of Government.

3. All the district reports, except Tinnevelly, fail more or less to furnish information in accordance with instructions issued for the guidance of District Forest-officers. This entailed much extra labor on my office, and in most cases information had to be collected or verified from my office records.

4. The instructions of the Board in paragraph 2 of its Proceedings, dated 6th November 1889, Forest No. 541, on the subject of information regarding natural reproduction, have received due attention. Full information regarding progress of forest settlement has also been furnished in the manner indicated in paragraph 5 of G.O., 5th March 1889, No. 153. These have somewhat increased the length of the report, which would otherwise not have exceeded 25 pages.

5. Referring to paragraph 16 of the Government's review of the last annual report, the bulk of the appendices has, in communication with the Acting Conservator, Northern Circle, been reduced by substituting abstract statements for Code forms Nos. 60, 61, 68, 69, 70, 71, 72-A, 72-B and 73-B. A careful examination of these abstracts will show that whilst omitting the rangewar details, no information which the Board and Government are likely to require for any *district* will be found wanting.

The abstract returns of forms relating to timber and other forest produce have been so prepared as to facilitate check from the time of felling or collection to that of final disposal.

6. These changes, however, do not reduce the work of my office, rather the contrary, as the abstracts can only be prepared after compilation of the usual detailed forms from the district returns. The detailed forms are, therefore, available in my office in manuscript if required by the Board. The cost of printing of bulky returns is of course saved, and the abstract forms are more handy and convenient for reference by the Board and Government.

If the system of abstracts is approved, it may in future be extended to the lists of reserved forests and lands (form 59), and areas under fire-protection (form 62), necessary alterations being made in the Departmental Code.

ENCLOSURE.—Administration Report for 1889-90.

Resolution—dated 6th September 1890, No. 545, Forest.

The Board resolves to submit to Government its annual review of the work of the Forest Department during 1889-90, as given in the reports of the two Conservators: for convenience of comparison, the same arrangement has been adhered to, as was adopted last year.

2. The reports were received from Conservators by the middle of August in print: this is extremely creditable, seeing how late some of the district reports were submitted to them, and the attention of Collectors will again be drawn to the need of greater punctuality in the matter.

3. The establishment for the Presidency consisted of the following officers:—

	Southern Circle.	Northern Circle.
Conservators	1	1
Deputy Conservators	8	4 (one on leave).
Assistant Conservators	5	7 (one on leave).
Sub-Assistant Conservators	7	6
Rangers	33	24
Foresters	77	49
Forest guards	396	348

The only change made was the formal constitution of Tanjore and Trichinopoly as a single Forest division.

The Northern Circle was under the charge of Mr. Gamble and the Southern Circle under the charge of Mr. Peet, acting, throughout the year; the usual remark as to the insufficiency of the establishments has to be made, but the Board trusts, for the last time. The proposed permanent scale, which was before Government at the beginning of the year, was not approved of, and a new one was called for, which will shortly be submitted. The Conservators mention that Rangers had to act as District Forest-officers, and Foresters and Guards as Rangers, and it is certainly not to the interests of Government that this should be so.

4. The gross receipts of the Department were Rs. 15,57,627 and the expenditure Rs. 11,65,358, leaving a balance of Rs. 3,92,269.

5. Area of Forests.—The following statement shows the changes in areas made in the different classes of forests under the control of the Forest Department:—

—	Area on 31st March 1889.	Added.	Excluded.	Area on 31st March 1890.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
A. Reserved forests	3,431	314	6	3,739
B. Reserved lands	11,857½	887½	417½	12,327½
C. Other forests	1,669	110½	303	1,476½
Total ..	16,957½	1,312	726½	17,543

Note.—Leased forests are included under Reserved forests and Reserved lands.
Forests reserved under previous rules and other orders are included under C.

Details of the various changes are given in form 59, which the Board is glad to note has been prepared with care.

The following statement shows the area of reserved forests (including leased forests) and reserved lands in each district, as well as the percentage of reserved areas to the uncultivated area. The Southern Circle is still, it will be seen, considerably in advance of the Northern Circle in regard to the finally settled area; the last column of the Conservators' statements, though the variations are considerable, *i.e.*, from 72·9 to 2·8, gives a general average of 34 per cent., which must be considered satisfactory: from this doubtless considerable areas will be deducted during settlement especially, in North Coimbatore, the district in which the 72·9 percentage occurs, but, on the other hand, large areas will also be added in other districts, in which selection is still incomplete, and the final figure is likely to be higher rather than lower:—

Northern Circle.	Reserved forests excluding forests reserved under previous rules.	Reserved lands.	Percentage of reserved areas to uncultivated area of the district.	Southern Circle.	Reserved forests excluding forests reserved under previous rules.	Reserved lands.	Percentage of reserved areas to uncultivated area of the district.
	SQ. MLS.	SQ. MLS.			SQ. MLS.	SQ. MLS.	
Ganjam	18	527	150·96	Chingleput	93	85	19·41
Vizagapatam	14	10½	31·81	North Arcot	377	576	56·92
Godávari	103½	917	111·53	South Arcot	119	430	24·44
Kistna	69	616	39·16	Salem	643	541	62·61
Nellore	54½	543½	29·22	Trichinopoly	137	99	31·13
Cuddapah	351	1,668	45·54	Tanjore	9	16	2·28
Kurnool	..	1,715½	92·72	Coimbatore	685	1,848	179·39
Bellary	3	377½	23·81	Madura	348	214	42·00
Anantapur	13½	262½	13·96	Tinnevelly	295	295	77·52
Nilgiris	199½	169	131·61	Malabar	158	443	17·77
				South Canara	49	974	68·24
Total ..	826	6,806½	..	Total ..	2,913	5,521	..

6. The actual additions during the year were in the Southern Circle, 113 square miles of reserved forests and 223 square miles of reserved lands, and in the Northern Circle, 195 square miles of reserved forests and 247 square miles of reserved lands. The reserved forests lay chiefly in Godávari 92½ square miles, Kistna 50 square miles

Nellore 48½ and Salem 45 square miles. Besides this, a systematic forest scheme for each separate district is being elaborated and orders have now been passed by Government in the case of the following districts, viz., Vizagapatam, Godávari, Kistna, Bellary, Chingleput, Trichinopoly, Tinnevelly, Nílgiris, Salem and South Malabar, determining, with some attempt at finality, the areas which shall be reserved for forest purposes, the method in which the district requirements in the way of timber, fuel and grazing are to be met, and the provision which is to be made for the necessary and customary needs of the villagers in the shape of petty privileges in these schemes, each district is treated by itself as a complete unit, and in the case of these ten districts, therefore, though actual settlement is incomplete, it can yet be seen now, with practical accuracy, what their final forest aspect will be. By the end of the present year, the Board trusts that every district in the Presidency will have been similarly dealt with, and on paper and in theory, at any rate, the forest organization of the Presidency will then be complete.

7. The question of free village forests and pastures is one that naturally forms a part of the district organization, yet it is one that in the present stage of settlement has had to be more or less pushed into the background. The Nílgiris, therefore, is the only district in which the matter is at all complete, though in most other districts, and especially in Nellore, it remains under consideration, and is not lost sight of. The Board looks on it as one of some importance as freeing the hands of Forest-officers for more complete control of Government areas and as mitigating, to some extent, the rise in prices, especially of fuel and grazing, which the great increase of forest revenue betokens. There appear to be only three ways of meeting the needs of the villagers in this respect:—

i. From the Government reserves.
ii. From areas, specially set aside as village pastures.
iii. From unreserved waste.

The first is, perhaps, the best in theory, but it is difficult to work in practice and means the reservation of larger areas; the last is the simplest and easiest now, but is likely to be the most troublesome in the future, when the waste areas have disappeared; the second is the one that commends itself most to the Board, provided sufficient stress is laid on the necessity for the protection of the area from the plough which is practically all that separates it from the third.

8. *Settlement.*—The following statement shows the progress made in settlement during the year in the form required by the Government of India:—

Circle.	Unreserved forest area, 1st April 1889.	Added during year (net).	Total.	Area notified under section 4, 1st April 1889.	Added during year.	Notified under section 16 during year.	Balance notified under section 4, but unsettled.	Total unreserved area on 31st March 1890.
1	2	3	4	5	6	7	8	9
Southern Circle	6,944	18	6,962	2,686	385	113	2,958	6,962
Northern do.	6,582½	259½	6,842	6,244	406	195	6,455	6,842

The area finally notified is again, the Board regrets to have to observe, very small, and matters remain in much the same condition as they were last year, that is to say, there is a very large area which is actually settled, the final notification of which is delayed either by protracted appeals, and second appeals or by the necessity for further revision of boundaries, or altered maps, for the preparation of which District Forest-officers with difficulty find time. Forest Settlement-officers, moreover, have so many districts on their hands at once, that, if alterations in any particular block are necessary, it may be weeks or months before they can arrange to return to it to carry them out; and even then, they may find that District Forest-officers cannot attend; this is to a certain extent unavoidable; something can be done to arrange tours more regularly, but the Act necessitates such long delay between the notifications, that it is a waste of time to tie an officer down to a single district: in

regard to its own office, the Board can only say that the establishment is already overworked; nor is the scrutiny of lengthy statements, many of them filled with figures, work that can with safety be pressed on too hurriedly: it trusts, however, that this will be the last occasion on which it will have to refer to these difficulties; already within the current year, final notifications for some 1,270 square miles have either been already issued, or are before Government for publication or are in the press; the revision of the papers of some of the larger areas is complete, and with the final notification of such large blocks as those of the Tinnevelly ghât forests, the Kollegál reserves in North Coimbatore, the Nallamallais and Veligonda hills in Kurnool, and the upper taluks in Godávari, the balance now outstanding will be very materially diminished: the Board has recently, too, sanctioned the employment of four temporary surveyors in the Southern Circle for the special preparation of settlement maps, and hopes that one of the chief causes of delay will by this means be remedied.

The following statement shows the state of progress at the close of the year under report:—

	Total under settlement.		Total finally notified.		Total settled and reported but not notified.		Total settled but not reported.		Settlement proceeding.	
		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Northern Circle—										
Ganjam	35	529	3	18	16	271	3	16	13	224
Vizagapatam	6	24½	1	14	..	..	..	..	5	10½
Godávari	76	1,020½	6	103½	29	241	2	20	39	656
Kistna	55	685	23	69	24	271½	1	78	7	266½
Nellore	120	579	37	54½	38	146½	13	32½	32	345½
Cuddapah	109	1,838	19	351	55	1,027	..	..	35	460
Kurnool	14	1,715½	..	..	10	1,680	..	..	4	35½
Bellary	55	318	2	3	23	82	1	5	29	228
Anantapur	44	276	5	13½	15	91½	2	28½	22	142½
Nílgiris	108	295½	51	199½	54	30½	2	1½	1	64
Total ..	622	7,281	147	826	264	3,841	24	181½	187	2,432½
Southern Circle—										
Chingleput	79	156	20	93	38	44	16	14	5	5
North Arcot	92	858	44	377	40	326	1	30	7	125
South Arcot	85	413	26	119	36	160	8	53	15	81
Salem	108	982	70	643	22	170	13	153	3	16
Trichinopoly	74	197	33	137	40	60	1	..	..	..
Tanjore	24	19	17	9	6	10	..	..	1	..
North Coimbatore ..	11	879	6	119	..	..	4	657	1	103
South Coimbatore ..	10	566	10	566	..	..	..	..	..	..
Madura	94	500	76	348	16	140	2	12	..	..
Tinnevelly	39	589	21	295	18	294	..	..	..	..
North Malabar ..	13	261	6	118	1	..	6	143	..	..
South Malabar ..	21	299	6	39	..	..	10	19	5	241
South Canara	27	152	14	50	5	56	4	37	4	9
Total ..	677	5,871	349	2,913	222	1,260	65	1,118	41	580

It shows a total of 3,739 square miles finally notified, 5,101 square miles settled and reported on, but not yet finally notified, and 1,299½ square miles settled but not reported on; in all, 10,139½ square miles settled; besides this settlement is pending on 3,012½ square miles. This result shows, the Board thinks, that satisfactory work has actually been done, though it is not possible yet to show it in a complete state. In Kurnool 1,680 square miles, Cuddapah 1,027 square miles, and Kistna 350 square miles are practically completed: in Ganjam, Godávari and Nellore progress was fair, and in Bellary and Anantapur it was bad: in the Southern Circle, North Coimbatore, Salem, North and South Arcot, Tinnevelly and Madura are the most forward districts, the information given, however, is scanty, and it is impossible to gather from the figures what particular stage the unsettled blocks have reached: in future years Forest Settlement-officers will report to Collectors on the subject, and the information will be incorporated in the Conservators' annual reports. The Forest Settlement-officers in the year were Messrs. Jones, Pinto, Saralbhalingam Naidu and Jagannadha Row, and their total cost Rs. 39,368.

9. DEMARCATION.—One thousand two hundred and ninety miles in length were demarcated in the Southern Circle at an average cost of Rs. 10-5-0 a mile; what length exactly was done in the Northern Circle is not stated, the Conservator in his abstract

giving area and not length; but, excluding preliminary work, some 700 miles of new and 800 miles of reclearing appear to have been completed as well as 32½ miles of fencing. The rates, as usual, vary from about Rs. 20 downwards, the highest occurring in North Coimbatore, Chingleput and Godávari. In the first case, the work is reported to have been also unsatisfactory, owing to a lack of proper supervision; and in the second case, it was apparently due to the clearance of new lines, in place of lines wrongly cleared in previous years; but in Godávari, Mr. Battie's work is said to have been thorough and reasonably cheap. Fencing, of course, costs more: the 3 miles in Godávari, which consisted of a trench and mound, with palmyra and screw-pine hedge, costing Rs. 97 a mile, and that in Anantapur Rs. 92-8-0 a mile. In other cases, too, the demarcation work, no doubt, partakes partly of the nature both of fencing and of fire-tracing, but the distinction between the three is difficult to maintain in practice, and varies much according to the nature of the particular block being demarcated. In the Southern Circle, a good deal of work was done in clearing boundaries for the special forest survey party to work on: Rs. 3,790 being so spent in Salem at an average of Rs. 7 a mile and Rs. 1,062 in Tinnevelly at Rs. 8-8-0. Notices under the Boundaries Act were also served on private owners in four cases in Salem and in one in South Arcot; of the former, three obeyed the notices, and in the latter, the work was done by the department and its cost of Rs. 140 is recoverable from the owner. In North and South Malabar work was backward, owing to sickness and want of labor; but even so, more should have been done. In the Northern Circle, good work was done in most districts: 235 miles being durably demarcated in Anantapur at a cost of Rs. 9-4-0 a mile, and 124 miles in the Nílgiris at a cost of Rs. 15-8-0; in Cuddapah, 117 miles were cleared for Rs. 17 a mile, in Ganjam 90 miles and in Godávari 58 miles finally and 73 in preliminary fashion. The importance of maintaining lines once cleared and keeping up pillars, &c., appears to be generally understood, 209 old lines being recleared in Godávari, 167 in Ganjam and 164 in Nílgiris, mostly at small cost, though in some cases, where the work included the digging out of stumps, as in Ganjam, it was high, and a large number of posts, pillars, cairns and survey marks were renewed. The total amount spent on demarcation was Rs. 31,548. The Conservator, Northern Circle, should give the number of miles done in future years, not the area surrounded.

10. Survey and Working Plans.—The chief work that is being done in the Presidency in the direction of survey is that of the Government of India Survey Party, specially detailed for forest duty in this Presidency. It worked wholly in the Southern Circle, in the districts of Salem, Madura and Tinnevelly, and within the year it completed 1,182 square miles of triangulation, 628 linear miles of traversing and 211 square miles of topography. Up to date, only 480 square miles of actual topography have been turned out during the two years that the Party has been in working, instead of the estimated 600 square miles a year, and the cost has been Rs. 226 per square mile instead of the estimated Rs. 70. The causes are said by the Deputy Superintendent of the Party to be insufficient clearance of the boundary lines in advance, especially in Madura, sickness, especially on the Palnis, the difficulties of the ground and the want of experienced subordinates: Rs. 4,599 appears to have been spent by the Forest Department in clearing lines for this Party. The Madras Survey Department took up the survey of the Kodaikánal settlement on the Palni hills, and that of the reserved areas in the Bellary district, completing the maps of seven reserves and nearly completing those of eleven more. A small temporary party attached to the District Forest-office is said also to have worked under the Deputy Superintendent of Survey, but to have done no work. The Conservator will report fully on this. Departmental surveys were made mostly at small cost for settlement purposes, a sketch-map being required to accompany every notification of a settled area, and the notification being, as already pointed out, frequently delayed for long periods for want of it. In South Canara and Ganjam a small amount of departmental work was done, 75 square miles being done in the former district at a cost of Rs. 972 and Rs. 500 odd being spent in the latter district; but departmental surveys generally have been stopped in accordance with the orders of Government. Working-plans were adhered to and found reliable in the case of the Sholakarai block in South Coimbatore, the Cauvery plantations in Trichinopoly, the Sríharikót jungles in Nellore and the blue-gum plantations on the Nílgiris. In the case of the Chinnar and Nóyil-Vellingiri working circles in Coimbatore, the Tekadi teak forest on the Anamalais, and the Sríharikót and North

Arcot casuarina plantations, revision is needed. In other districts, annual plans of operations are all that can as yet be framed, but these were generally worked upon and fellings in most of the forests proceed now on reasonable lines and under control, and not in the haphazard and wasteful system of former years : the collection of statistics for the preparation of proper working-plans at the same time is being carried on, and plans for some twelve more reserves are almost completed. The matter is, however, one that necessarily awaits both settlement and organization and progress must be slow. The provision of railway fuel receives attention.

11. FIRE-PROTECTION.—In this important matter satisfactory results were obtained ; in the Southern Circle, 408 square miles were added to the fire-traced area of last year, 99 per cent. escaped, as against 97 per cent. in last year, and the cost was reduced from Rs. 13 to Rs. 10-10-5 per square mile. In the Northern Circle, 1,033 square miles were added to the area attempted, 92·5 per cent. escaped, as against the 86 per cent. of last year, and the cost was reduced from Rs. 8 to Rs. 6-10-0 per square mile. The figures are possibly not quite accurate, but so far as they go they show a considerable improvement on those of previous years and must be considered satisfactory. The cost may seem high, but the Board pointed out in last year's report that it was impossible to compare the Madras figures with those of Bombay, and the protection of the large areas of parched grass and scrub must necessarily be costly.

The following statement shows the areas attempted and the results obtained by districts :—

Districts.		Area attempted.	Area burnt.	Expenditure during the dry season of 1889-90.	Cost up to end of 1889-90.
		SQ. MILES.	SQ. MILES.	RS.	RS.
Northern Circle *	Ganjam	530·84	29·32	925	4,278
	Vizagapatam	36·81	·06	225	225
	Godávari	198·04	·70	476	872
	Kistna	153·21	1·62	722	4,628
	Nellore	117·19	10·50	936	2,380
	Cuddapah	756·27	81·09	5,214	30,963
	Kurnool	63·56	6·29	694	4,289
	Bellary	389·08	29·67	3,227	16,274
	Anantapur	90·34	1·20	1,362	8,108
	Nílgiris	364·32	39·83	2,779	16,460
	Total ..	2,699·66	200·28	16,560	88,477
Southern Circle †	Chingleput	36·40	0·003	549	3,315
	North Arcot	856·29	4·92	2,081	17,794
	South Arcot	203·50	2·06	1,420	6,495
	Salem	48·40	0·51	1,629	16,645
	Trichinopoly	87·11	0·34	474	2,337
	Tanjore	..	..	..	..
	Coimbatore	77·41	0·06	1,560	9,990
	Madura	303·83	3·49	3,885	27,319
	Tinnevelly	150·37	2·39	4,382	16,069
	Malabar	121·00	0·34	2,682	17,623
	Canara	25·59	0·20	1,332	3,687
	Total ..	1,909·90	14·31	20,194	1,21,274

* NOTE.—Cost of area protected is Rs. 6-10-0 a square mile.
7·41 per cent. of the area attempted was burnt.

† NOTE.—0·73 of the area attempted was burnt.
Cost of area protected is Rs. 10-10-5 a square mile.

North Arcot comes first, with 856 square miles attempted and only 5 square miles burnt : it is in this case that the Conservator appears to think the figures unreliable, since he knows that the establishments there are inadequate, and the risk of fire great ; it is creditable to the District Forest-officer, Mr. Sheffield, if his figures can be relied on. Cuddapah comes next with 756 square miles attempted and 81 burnt ; only 320 square miles were attempted last year, and the increase is due to the inclusion by the District Forest-officer, Mr. Lodge, of the large areas of the Seshachalam reserve, and the Lankamalais ; of the additions, however, only a portion was saved ; then come Ganjam, 530 square miles, Bellary 389 square miles and the Nílgiris 364 square miles, in all cases an increase on last year ; in the last, almost the whole of the important Mudumalai forest was saved. Madura follows with 303 square miles the same as last year ; a few small fires occurred here, but no great harm

was done, and Mr. Gass has exceptional difficulties in the shape of the numerous zemindaries bordering on his forests. The figures are less in the remaining districts, but good work was done in nearly all; and in some of them, perhaps, the protection was more complete and effective than in districts which show on paper larger areas. Godávari and Anantapur in the Northern Circle, and Chingleput, North Malabar and South Coimbatore in the Southern Circle come within this category. Kurnool with its large blocks on the Nallamallais and North Coimbatore with its large areas in Kollegál and on the slopes of the Nílgiris were bad. In Salem, fires were caused by sparks from the engines, and Mr. Hooper is taking steps to fire-trace the railway line. The rates varied, but were only exceptional in the case of South Canara; the unmanageable shape of the blocks there is said to be the cause of it, but the Conservator is investigating the matter. The weather was wet on the West Coast districts, and the south-west monsoon was early; but the north-east monsoon was late and the eastern districts suffered for that reason. The Conservator, Southern Circle, says that 4,566 square miles of *unprotected* forest or 70 per cent. escaped, and the Board can only hope that it was so; but the temptation to wood-cutters, herdsmen and junglemen to fire forests is so great, and the Madras forests lie so open to attack, that it is a little unexpected if the unprotected area escaped.

12. Grazing.—The following table shows the receipts from grazing for the last four years :—

Districts.		1886-87.	1887-88.	1888-89.	1889-90.
1		2	3	4	5
		Rs.	Rs.	Rs.	Rs.
Southern Circle ..	Chingleput	641	1,244	2,695	2,087
	North Arcot	1,423	30	3,318	4,466
	South Arcot	1,306	2,226	1,930	2,683
	Salem	24	..	5,257	12,016
	Trichinopoly	2,328	5,140	5,893	6,358
	Tanjore	414	593	751	739
	Coimbatore	27,707	34,633	29,677	33,432
	Madura	1,392	1,524	2,462	2,321
	Tinnevelly	313	609	312	158
	Malabar	117	27	101	115
	Canara	..	12	..	..
	Total ..	35,665	46,038	52,396	64,375
Northern Circle ..	Ganjam	5	..	..	7
	Vizagapatam	..	..	20	23
	Godávari	971	947	1,456	1,959
	Kistna	37,927	38,711	49,442	48,541
	Nellore	4,683	12,784	14,769	16,036
	Cuddapah	174	1,227	2,018	3,814
	Kurnool	1,109	4,888	6,232	5,419
	Bellary	337	403	442	878
	Anantapur	6	16	957	1,154
	Nílgiris	326	797	2,123	1,639
	Total ..	45,538	59,773	77,459	79,470

It will be seen that the receipts are rising; this is in accordance with the policy of Government that herd cattle should be allowed (under control) into the reserves on payment of fees, which should rise gradually from small beginnings to the sanctioned scale, but care must be taken that the rise *is* gradual, and the increase from 5,000 to 12,000 in Salem should have been explained; there is a rise also in Coimbatore, but this is only to the figures of 1887-88; in other districts the figures seem to call for no remark. As usual, Kistna, where the practice has been in force for a long time, heads the list with 48,541; then comes North Coimbatore with 23,091, and then Nellore 16,036, Salem 12,016 and South Coimbatore 10,341. As a general rule, some of the reserves are closed to grazing, while the rest remain open; steps have been taken to exclude goats and also sheep, one variety of which the Conservator, Southern Circle, says is as bad as a goat. The Board is not acquainted with that particular variety, but, as a rule, sheep are comparatively harmless, and since the poorer ryots must have something less costly than ordinary cattle to eat and milk and use for manuring purposes and, generally speaking, to invest money in, the grazing of sheep should, where possible, be permitted. It is inadvisable to attempt to discourage both

sheep and goats, and the policy adopted, therefore, should be to encourage the former at the cost of the latter. Neither Conservator gives definitely the information called for in G.O., dated 7th May 1890, No. 314. In Cuddapah full fees on cattle are already charged, but it is suggested that extra fees should in addition be charged on alien cattle, mostly from Nellore. The Board is opposed to any such increase as a mere matter of forestry, since the distance these cattle have to come is itself a sufficient tax ; if the discouragement of them is advisable on other, *e.g.*, police grounds, that is a different matter. In most districts, half rates were charged and these should not be hastily raised ; when the grazing inside reserves is correspondingly improved, the rates can be raised, but till then, — though it is perhaps a case of putting the cause after the effect,— the matter should be proceeded with very gradually. The Board does not agree with Colonel Campbell Walker that there should be a general policy of auctioning out all grazing on reserved areas—if this is what his remark about "offering the pasturage for sale" means ; it may be advisable to do so in special cases, such as padugais and plantations that have been created by the Forest Department, but to do so generally would be most inadvisable. The grazing on unreserved lands, of which so much is generally made, as being "free to all," is in the hot weather, the time when it is most wanted, practically speaking *nil*, and the purchasers of the grazing within reserves who would then have a virtual monopoly of all the grazing in the district, would have to bid high for it and would be able to exact a corresponding price for it from the ryots. The system might be easier to the Forest Department, but would be dangerous to agricultural interests, and the statement that under this system "there would be no compulsory fees and therefore no ground for complaint" is absurd. The Board is quite of the opinion that grazing within *forest* areas is always an evil, but it is, under present conditions, a necessary evil, and Forest-officers must realize that, though admittedly a difficult, still it is a necessary part of their duty to provide for it, and that according to their success or otherwise, in doing so, will they be judged. Departmental attempts at hay-making in North Arcot were not a success, but the ryots were subsequently allowed to try hay-making for themselves and their efforts were more encouraging, so that there is likely to be some demand for a continuance of the practice. The Board agrees with the Conservator that everything that can be, should be done in this way to encourage the ryots to cut or silo, or dry the grass in reserved areas for themselves.

13. *Police.*—The number and results of prosecutions, as compared with those of last year, are shown below :—

—	Cases pending.	New cases in the year.	Convictions.		Acquittals.		Compounded.		Withdrawn.		Cases pending at the close of the year.
			Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1	2	3	4	5	6	7	8	9	10	11	12
Northern Circle—											
1889-90 ..	281	1,355	680	1,672	287	954	511	987	..	..	158
1888-89 ..	125	1,733	834	1,964	316	906	427	985	*102	..	179
Southern Circle—											
1889-90 ..	207	2,679	904	2,157	385	1,308	1,187	2,750	92	246	318
1888-89 ..	173	2,201	860	1,827	334	1,235	897	2,269	76	226	207

* These 102 cases were actually pending at the end of 1888-89. Their entry under cases "withdrawn" in the Board's statement was a mistake ; hence the increase in the number of cases pending at the beginning of 1889-90.

In the Northern Circle, the number of cases was considerably less than in last year and the percentage compounded considerably greater, 35 per cent. as against 27 per cent. ; the percentage of acquittals was about the same, 19 against 20. In the Southern Circle, the number of cases was considerably greater, the percentage of cases compounded greater, 46 against 41, and the percentage of acquittals about the same, 30 against 28 ; a higher figure than that of the Northern Circle. The offences, it will be seen from Form 63, were mostly unauthorized felling or appropriation of produce—1,809 in the Southern Circle and 1,090 in the Northern Circle, and grazing without permission, 495 in the Southern Circle and 141 in the Northern Circle. The figures are largest in

Trichinopoly, Salem, South Arcot and South Canara; in other districts they do not appear excessive, but in the districts named, and especially in Trichinopoly where the number of new cases was 646, the causes for this large number should be explained. Complaint is made from both circles that the staff is inadequate, and instances are given of defiance of the law on the part of the public. There is no doubt some ground for the complaint, more particularly in out-of-the-way tracts, such as North Coimbatore, but the description drawn by the Conservator, Southern Circle, must, the Board thinks, be very much overdrawn; indeed, if it is not, it reflects but little credit on the Forest Department. The particular case quoted, in which Mr. Morgan met a gang of 1,000 people shooting and hunting on the Eastern slopes of the Nílgiris, seems exceptional, and details of it should be reported for the information of the Board; but the other instances quoted are not conclusive; for instance, the eight soldiers referred to as camping for a month near Vellamundi and shooting without licenses had probably no idea that they were "setting the law at defiance," and, if they had, it would seem to have been easy to have ascertained who they were and either reported them to their own Commanding officer, or to the Collector. In the only detailed case given in the Northern Circle the deficiency lay, as pointed out by Mr. Peet, not in the number of the guards, but in their honesty. Government will no doubt be quite prepared to strengthen the staff on due proof of its inadequacy, and the Board which fully agrees with Conservators that it is inadequate to the increasing needs of the department, proposes shortly to address Government on the subject; but descriptions of the sort, given by Colonel Campbell Walker, defeat their own purpose. Petty thefts doubtless are numerous, but open lawlessness is another and more serious matter, and complaint of it ought to have been more fully substantiated. The power of compounding has evidently been freely resorted to, and in many cases it is, no doubt, an acceptable and proper method of dealing with petty offences, but care must be taken that it is not allowed to degenerate into practically condoning the more serious ones. The particular case of Goomsur, where it is reported to have been had recourse to, because owing to the hostility of the Sub-Magistrate, it was impossible to obtain a conviction in the ordinary way, should be reported to the Board. The percentage of acquittals was high in Chingleput, North Arcot, Madura and Tinnevelly; compounding was most resorted to in South Arcot and Trichinopoly; in the latter case, it was probably properly made use of. The suggestion made by Colonel Campbell Walker that gun licenses should contain a note that a special license should be obtained before shooting in reserved forests, commends itself to the Board.

14. Natural Reproduction.—This, so far as the mere possibility of growth goes, has now got beyond the experimental stage, and it may be said that *given protection from fire and cattle*, there must be regrowth, varying according to the nature of the soil, &c., but sure and certain even under the most adverse circumstances; and since virtually the whole of the reproduction in the forests of the Presidency must be natural, the fact is satisfactory. The likes and dislikes of particular trees, however, in the matter of shade, undergrowth, moisture and the like, have evidently still to be studied, as also the effects of such individual peculiarities as time of seeding—*i.e.*, whether before the firing season or after—which species reproduce best by seedlings and which by coppice, &c. Complaint is made from certain districts, *e.g.*, North and South Coimbatore and Madura, that the rank undergrowth and long grass which appear to be the first effects of protection choke the very seedlings: the Conservator proposes, as a remedy, to clear away the undergrowth: the result should be reported, but it will be difficult to carry out this proposal over large areas, and it is possible that all that is really needed is more time and that the seedlings will eventually acquire roots strong enough to enable them to push through: complaint is also made that reproduction from seed of teak, in teak forests, *e.g.*, North and South Malabar, is almost entirely absent; and the District Forest-officer ascribes this to the seeds failing to reach the ground, owing to the thick covering of fallen leaves: it was pointed out, however, by the Conservator, Southern Circle, in his last year's report that rosewood seedlings appeared in the Sholakarai block, in a forest in which mature rosewood trees did not occur, and it is possible that there may be some similar sort of natural rotation in the case of teak. In regard to young teak and *Hardwickia* seedlings withered by drought, the

Conservator points out that these are often making underground growth, and that in a year or two their roots may be long enough to enable them to withstand the dry weather. The reproduction of *Terminalia tomentosa* in some of the North Malabar forests has been greatly checked by monkeys and squirrels eating the seeds. In regard to the coppicing of casuarina, the Board is disposed to agree with the Conservator, Southern Circle, that it is unnatural. Satinwood and *Terminalia tomentosa*, however, are said to coppice well in Bellary and *Eucalyptus* on the Nilgiris. The general reports from the districts are satisfactory, showing good growth where protection has been good, even on the most unpromising areas; and a strong reproduction of trees of the more valuable kinds, such as teak, rosewood, *Hardwickia*, sandal, satinwood and *Pterocarpus marsupium*; there was good reproduction in the blocks cut over for the railway fuel supply in Kurnool, but it was much injured by fires: the coppice reproduction in the Sholakarai block is said to have been admirable, teak, rosewood and *Pterocarpus marsupium* appearing in large numbers, and many of them being already over 5 feet high; in some of the Chingleput reserves, there is marked improvement; in South Arcot, both protection and reproduction are bad.

15. Artificial Reproduction.—The amount spent on plantations, topes and cultural operations is given below:—

		Area.	Cost during the year.			Area.	Cost during the year.
		Acs.	Rs.			Acs.	Rs.
Southern Circle.	Plantation	12,044	25,613	Northern Circle.	Plantation	7,519¾	13,979
	Topes	18,888	4,741		Topes	6,855	2,125
	Other areas	4,203	2,302		Other areas	1,171½	2,941
	Total ..	35,135	52,656		Total ..	15,546¼	19,045

The amount spent was Rs. 51,701 against Rs. 50,748 in the previous year, and the total area, 50,681 acres against 49,319½; the increase is under "plantation" and "other areas," "topes" remain practically the same, and the chief items are the teak plantations at Nilambúr, the bluegum plantations on the Nilgiris and the casuarina plantations along the coast: the other items are small and the importance of artificial reproduction compared with that of natural is small. In the Southern Circle, casuarina was the chief tree planted, 14 acres in Chingleput, 76 acres in South Arcot, 21 acres in Trichinopoly and 8 acres in South Canara being planted up; cashew-nuts were dibbled in in South Arcot producing 1,630 seedlings and in Tanjore over 55 acres; 5,000 mango, jack, and divi divi were planted out in North Coimbatore in the Bylur plantation, and 20 seers of arnatto seed sown in beds; and 7 acres, out of 50 acres intended, were planted with teak seedlings in South Coimbatore: in Tinnevelly, the reclamation of the Kudurimalai teri proceeded, 150 acres being planted with palmyra nuts, 46 acres with *Acacia planifrons* pods, and 36½ acres with nanal grass. In the Nilambúr plantations, 140 acres were stocked with teak and mahogany, and 10 with bamboo; casualties in another block were also replaced. A pound of mahogany seed of *S. macrophylla*, which is believed to be free from the attacks of the borer than *S. mahogani* was also sown; figures kept for the last 5 years show that the stock had been rather over-estimated, but Mr. Hadfield has remedied this by limiting his thinnings. In the Northern Circle, casuarina was extended in Godávari, 272 acres; Kistna, 10 acres pure and 8 acres mixed with other trees; and Nellore, 100 acres, of which almost the whole was destroyed by a cyclone; in Ganjam, 200 acres were sown with nim, tamarind and *Cassia tora*, and large plantings of Arabian dates are said to have been in progress: mahogany, teak, *Frenela* and *Pinus longifolia* were planted on the hills; and blanks were filled up in particular blocks in other districts. Creeper cutting and the clearing of undergrowth was continued in both circles, with possibly good effect on reproduction; in Coimbatore efforts are being made to eradicate the prickly-pear which takes possession of the fuel and fodder reserves, but the results are costly, coming to Rs. 57 an acre: the plant has already gained a firm footing in the district and will be extremely difficult to get rid of.

16. Exotics.—The appendices to the Conservators' reports show the results of such experiments as have been made in this direction during the year: *dates* germinate readily, but the after casualties are numerous, especially in the wetter Coast districts; off-sets appear to be of stronger constitution than seedlings, but on the other hand are more difficult to obtain. In a small experiment made by Mr. Morgan in North Coimbatore, *carob* grew well, and bore fruit; this is a useful tree and the seeds should be distributed elsewhere. Various species of *Eucalyptus* were tried on the plains, but with the exception of *E. robusta*, all failed, germinating well but dying soon after: *E. robusta* seems to promise well; at slight elevations, *e.g.*, at Palmanér, Wynaad, North Coimbatore and the Pápanásam hills *E. citriodora*, *E. resinifera*, *E. paniculata*, *E. rostrata* do fairly well. *Giant bamboos* continue to do well in Wynaad, Nilambúr and South Canara. *Ipecacuanha* promises well at Nilambúr. *Mahogany* grows well and vigorously in the moister climate. *S. macrophylla* is now being taken up, as one tree, believed to belong to that species, is doing exceptionally well at Nilambúr: the various *rubber* trees grow well, but nothing is said as to their yield: a special experiment is being made in *silk* under the supervision of the Honorable Mr. Garstin, C.S.I.

17. Buildings and Roads.—The amounts spent were as follows:—

	Northern Circle.		Southern Circle.	
	Actual expenditure.	Revised estimate.	Actual expenditure.	Revised estimate.
	Rs.	Rs.	Rs.	Rs.
Roads	9,752	16,300	17,839	20,000
Buildings	13,422	18,000	17,652	20,000
Other works	826	1,500	446	800
Total ..	24,000	35,800	35,937	40,800

The figures are much the same as last year, but they amount to only about 5 per cent. of the total expenditure, and are not at all sufficient for the proper opening out of the forests; the time of District-officers is, it is true, fully occupied with settlement and other work, and the working season in some districts is short, but more use might perhaps be made of contractors, or of the piece-work system; good roads and rest-houses are so essential to the due development of the larger and more important areas, such as the Anamalais in South Coimbatore, the ghât forests in Tinnevelly, the Nallamallais in Kurnool and the upper taluks in Godávari and Ganjam, that the Board trusts that greater attention will be directed to this particular item of expenditure in future years. In regard to roads, Rs. 6,295 were spent in South Coimbatore, partly on roads for tramways, partly on ½ a mile of timber slip, and partly in making 6 miles of road in combination with the Local Fund Department; Rs. 3,438 were spent in some heavy ghât work in Madura, Rs. 2,185 were spent in Tinnevelly in tracing and cutting 8 miles of bridle-path, Rs. 2,030 were spent in South Arcot on some 4 miles of ghât road, and Rs. 2,024 were spent on the Nílgiris; substantial and useful work was done also in most of the remaining districts. In regard to buildings, the Conservator, Southern Circle, has failed to give the list that was called for in last year's report, and only shows an abstract of them in his form 73-B; this shows 352 buildings, valued at Rs. 49,603; an improvement on last year's figures of 12 buildings, worth Rs. 9,129, but it is not stated what the buildings in each district are; Madura, Tinnevelly and South Malabar appear best provided for. In the Northern Circle the total number and value of completed buildings is No. 41—Rs. 41,764 and of these 29 are rest-houses and 12 range-houses; there is also one head-quarter's bungalow in Kurnool, worth Rs. 11,000, and one at Anantapur, worth Rs. 6,991; the districts best provided are Cuddapah, which has 6 rest-houses and 5 range-houses, and Ganjam, which has 7 rest-houses and 3 range-houses; the progress, which is slow, appears also to be steady, and during the year good work was done in Madura, Rs. 5,295 being spent on one Range-officer's quarters and office, two foresters' quarters and one depôt-keeper's quarters; Kurnool, Rs. 2,514; Tinnevelly, Rs. 2,410; Ganjam, Rs. 2,158; and Kistna, Rs. 2,108: in

next year's report, both Conservators should give lists of completed buildings, district by district, showing cost and material, *i.e.*, whether of stone or of brick or of timber.

In regard to tramways, 641 tons of wood were carried along the six miles of rails laid down in the Srîharikót forest in Nellore: in Coimbatore four miles of rails, and in North Arcot, two miles were used, but the exact amount of timber carried out in the year is not stated: both Conservators testify to the utility of the tramways, and submit calculations comparing the cost of carriage with that of carriage by carts: the Government of India remarks on last year's report have not been received in time to enable the Conservators to submit calculations in the exact shape required, but the statement prepared by the Conservator, Northern Circle, except that it allows for a very small and wholly insufficient percentage for deterioration, gives the necessary information for his circle, and shows that the cost of carriage by cart is about double that of carriage along rails; this is on the sandy soil and over the easy levels of Srîharikót: for the Southern Circle, the Conservator refers to a special report on the subject submitted by the Acting Conservator in March last, from which similar information can be extracted and which is added as an appendix to this report; in that the District Forest-officer, Coimbatore, estimates a carriage of 58 cubic feet, at a cost of Rs. 3, along the rails, as against a cost of Rs. 9-2-0 by carts, but in this no allowance is made for either interest on outlay or deterioration, and the Acting Conservator, therefore, prepares an estimate for a theoretical year's working of 54,000 cubic feet, which includes 4 per cent. on outlay and 1 per cent. for deterioration, which shows that the cost of carriage by tramway is about two-thirds of that of carriage by cart: this is on the Anamalais. The North Arcot figures also show a large saving in favor of the rails, but this is exclusive of deductions, and it is impossible to remedy the omission from the figures given by the District Forest-officer; the quantities given are so small that an addition of 10 per cent. on outlay would altogether upset them: in next year's report, Conservators should give detailed information in some form similar to that adopted in the Northern Circle report, and should allow 4 per cent. interest on outlay and a percentage deduction for deterioration of plant, calculated according to local conditions, though in no case less than 6 per cent.; under maintenance, too, should be included any special establishment which may be maintained and not merely cost of haulage. As the Conservator points out, the figures given in these early stages are, perhaps, hardly fair to the rails, since money has been wasted through inexperience, and the full power of the tramways is not yet developed. The North Arcot experience is instructive, as showing that a well laid roadway is economical in the long run, and the Conservator suggests the advisability of employing a competent Engineer to this end: sufficient advice and assistance, however, would probably be obtained from the local Public Works Department.

18. YIELD AND WORKING.—The following statement shows the outturn for the year:—

	Timber including sandal-wood.	Fuel.	Bamboos.	Minor produce.
	C. FT.	C. FT.	NOS.	VALUE IN RUPEES.
By Government Agency—				
Southern Circle	182,315	867,532	23,759	30,100
Northern do.	121,225½	851,983	108,386	12,566
By purchasers—				
Southern Circle	1,663,868	7,039,783	5,470,344	2,16,950
Northern do.	1,547,912	4,459,179	7,056,288	1,33,950
By free grants—				
Southern Circle	6,523	800	21,415	37
Northern do.	15,630	230	13,989	400
Total—				
Southern Circle	1,852,706	7,908,115	5,515,518	2,47,087
Northern do.	1,684,767½	5,311,392	7,178,663	1,46,916

In the Southern Circle there was a satisfactory increase, under departmental operations, of 16,000 cubic feet under timber, 356,000 cubic feet under fuel and 4,000 in number under bamboos, showing that the department is making steady progress in

substituting a proper system of cutting for the old seigniorage system. The working out of dead teak in North Malabar, thinning of teak saplings in Nilambúr, extraction of redwood roots in North Arcot and recommencement of sandalwood cuttings in Salem account mainly for the increase under timber. Under fuel, the large demands from the South Indian Railway, 354,168 cubic feet, from the Kolar gold mines, 96,423 cubic feet, and from Cotton companies in Tinnevelly account for the increase. There was a decrease of Rs. 37,000 under minor produce, due partly to a bad season, and partly to a falling off in the demand for wild mace in South Canara. The delay in the completion of the tramway in South Coimbatore and the slack demand for teak saplings and redwood affected the sales which were therefore Rs. 33,000 less than in last year. In the Northern Circle, on the contrary, there was a heavy decrease of 140,000 cubic feet under timber, and of 17,000 cubic feet of fuel; bamboos increased almost a half, and minor produce, excluding sandalwood from last year's figures, produced about 4,000 more, and the sales, though the value of bluegum, casuarina and red sanders fell, rose by some Rs. 25,000, but of this Rs. 10,000 was not realised within the year.

The receipts from departmental work were highest in Nellore, Rs. 46,000; North Arcot, Rs. 42,000; South Malabar, Rs. 38,000; South Canara, Rs. 35,000; and the Nílgiris, Rs. 30,000; the value of stock in hand at the end of the year was Rs. 44,918 in the Southern Circle and Rs. 32,476 in the Northern Circle.

The bulk of the receipts came as usual from removals by private agency, the figure being Rs. 6,96,965 for the Southern Circle and Rs. 4,69,363 for the Northern Circle. Here also there was an increase in the Southern Circle of Rs. 61,000 and a decrease in the Northern Circle of Rs. 30,000; the increase in the former is under timber and grazing, due mainly to the removal of higher class timber; bamboos were some 7,13,000 fewer in numbers, but sold for about the same price as in last year, because there was a larger proportion of "split" taken, the seigniorage on which is, of course, higher than it is on unsplit. The Madras Railway takes a large amount of fuel under this head, some 349,180 cubic feet in all going to Railways. Rs. 21,000 arrears of tree rents transferred from land revenue were paid over during the year in South Arcot, but this was counterbalanced by a transfer of Rs. 30,000 the opposite way in Salem: the Conservator thinks this is a mistake and is in correspondence with the Collector about it; the result of the correspondence should be reported.

The decrease in the Northern Circle was chiefly under firewood and came under Railway fuel in Cuddapah and Kurnool due partly to less demand, partly to an attempt to regulate the supply, which has not hitherto been properly checked; the chief revenue-producing districts under private agency were, North Arcot, Rs. 1,32,000; Salem, Rs. 1,28,000; Cuddapah, Rs. 1,14,000; and Kistna, Rs. 92,000: grazing receipts were highest in Kistna and North Coimbatore.

In the form adopted by Government in its review of last year's report, the total yield compares with that of previous years as follows:—

Years.	Southern Circle.			Northern Circle.		
	Timber and fuel.	Bamboos.	Minor produce.	Timber and fuel.	Bamboos.	Mnior produce.
	C. FT.	NOS.	VALUE IN RUPEES.	C. FT.	NOS.	VALUE IN RUPEES.
1887-88	7,677,600	Not known.	2,60,661	7,775,639	9,087,693	1,24,277
1888-89	9,732,988	6,220,090	2,79,884	8,935,990	4,888,271	1,28,105
1889-90	9,760,821	5,515,518	2,47,087	6,996,159½	7,178,663	1,46,916

The figures for the Northern Circle are not so satisfactory as those for the Southern Circle; the low figures under bamboos for last year is said to be due to a mistake, 11,000 cart-loads in Kurnool being entered only as 11,000 bamboos. The averages as given by Conservators show a satisfactory decrease in cost in the Southern Circle and a rise in value in the Northern Circle, but there are striking differences in some of the figures, *e.g.*, in the Southern Circle, departmentally collected timber cost annas

3-5 and realised annas 9-10 per cubic foot; in the Northern Circle the figures were annas 2-11 and annas 4-9; bamboos cost 2 pies each and sold for annas 1-3 in the Southern Circle, and in the Northern Circle cost 2 pies and sold for 5 pies, and minor produce in the Southern Circle cost annas 15-3 a maund to collect and realised Rs. 2-6-2, and in the Northern Circle cost annas 3-7 and realised annas 7-7: the average receipts under removal by private agency do not show these differences, though the cost is slightly less in the Northern Circle than in the Southern Circle; the *net* profit under private agency is not shown, but it is evidently very much less than that of departmental working, and when the waste caused in removals by private agency also is considered, the balance in favor of departmental agency is so great that the Board trusts its employment will be steadily extended. Free grants were made, as usual, but not to any large extent.

19. FINANCIAL RESULTS.—The following statement shows the financial results of the year:—

—	Receipts.	EXPENDITURE.	
		A.	B.
	RS.	RS.	RS.
Southern Circle	9,51,017	3,85,586	3,21,442
Northern do.	6,06,610	2,18,513	2,39,817
Total ..	15,57,627	6,04,099	5,61,259
	..	11,65,358	
Balance ..	..	3,92,269	

The surplus rose in the Southern Circle to nearly 2½ lakhs, the highest figure on record and some Rs. 88,000 more than the surplus of last year, and in the Northern Circle to Rs. 1,48,280, also the highest figure for the circle, but only some Rs. 6,000 more than last year's. The total surplus was nearly 4 lakhs against the 3 lakhs of last year; this is, of course, extremely satisfactory, but the Board agrees with Colonel Campbell Walker that it would be preferable to invest a far larger proportion of the receipts in roads, buildings, fire-lines, &c., and to increase the efficiency of the staff, than to merely pay it over to general funds as surplus. With an increased staff, of the necessity of which Government approved in its review on last year's report, and about which the Board is shortly about to address Government, it will be possible to spend effectively much larger sums on works of permanent improvement, and the Board trusts to be able to report satisfactorily to this effect next year.

The largest revenue-producing districts were North Arcot, Rs. 1,77,859; Salem, Rs. 1,37,872; Cuddapah, Rs. 1,34,654; South Arcot, Rs. 99,288; and Kistna, Rs. 93,892; Nílgiris and Ganjam show heavy deficits; in the former case due chiefly to expenditure on works of improvement, but in the latter case, falling also under departmental fellings. South Canara, Bellary, Anantapur, South Malabar and Vizagapatam also show deficits, mainly due to expenditure on works of improvement. Considerable sums were spent on such works in North Arcot, Salem, Cuddapah, Madura and the Nílgiris.

In the Southern Circle, the receipts were Rs. 66,017 in excess of the revised estimate and Rs. 52,931 in excess of the receipts of the previous year. The excess was distributed over all the heads of revenue except I (*a*) and (*e*), II (*c*), III and V (*a*). The decrease under I (*a*) occurred chiefly in South Coimbatore and North and South Malabar, and that under I (*e*) chiefly in South Canara. The decrease under other items was small. There was a falling off under I (*b*) in Madura and under I (*d*) in North Arcot and under II (*e*) in Salem. The gross receipts increased in North Arcot under I (*b*), in South Arcot under II (*b*) and (*e*), in Trichinopoly under II (*a*), (*b*) and (*d*) and V (*c*), in Coimbatore under II (*e*), and in Madura under I (*b*) and II (*a*). In Tinnevelly the increase occurred in almost all the items.

In the Northern Circle the receipts fell short of the revised estimate by Rs. 33,390 and of the receipts of the previous year by Rs. 10,310. The decrease occurred chiefly

under I (*b*) and (*d*), II (*a*), (*b*) and (*c*) and V (*c*). The decrease under I (*b*) was chiefly in Nellore and under I (*d*) in Nílgiris; under II (*a*) in Godávari, Kistna, Cuddapah and Kurnool; under II (*d*) in Ganjam, Cuddapah and Kurnool; and under II (*c*) in Kurnool. Under V (*c*) the decrease occurred chiefly in Godávari. The increase under I (*a*) occurred in Cuddapah and Godávari, and under I (*e*) in Nellore; under II (*d*) and (*e*) in Nellore and Cuddapah, and under III in Kurnool.

In the Southern Circle, the expenditure fell short of the revised estimate by Rs. 42,972, and of the actuals of the previous year by Rs. 35,104. The decrease occurred chiefly under A in I (*a*), (*c*), VI (*c*) and VIII (*a*), and under B in I (*a*) and (*c*), II (*b*) and (*c*) and III (*f*). There was a large increase under I (*b*) and VIII (*c*). All the districts showed a surplus balance except North Malabar and South Canara.

In the Northern Circle the expenditure fell short of the revised estimate by Rs. 41,670 and of the actuals of the previous year by Rs. 16,212. The decrease occurred chiefly under A in I (*a*) and (*b*), VI (*a*) and (*c*), VIII (*a*) and (*b*). There was also an increase under B-I (*b*). The deficits occurred in Ganjam and the Nílgiris.

General.

All the districts in the Presidency were inspected by Conservators, except Chingleput, Tanjore and Kurnool; in the Southern Circle five District Forest Offices were inspected by Treasury Deputy Collectors and three by the Examiner of Forest Accounts; in the Northern Circle, four District Forest Offices were inspected by the Treasury Deputy Collectors. Collectors should see that their District Forest Offices are inspected at least once a year by Treasury Deputy Collectors. District Forest-officers acquitted themselves with credit, some of them particularly so, and showed much interest in their work, but there was a considerable amount of misconduct on the part of subordinates; this is perhaps to be expected in these early days, since the pay is low, the work hard, and the temptation great. The Conservator, Southern Circle, cries out against the tendency to increase of office work, and this has undoubtedly to be combated. Range-officers, in particular, must not be allowed to become mere corresponding officers: and correspondence between them and their subordinates should be strongly discouraged: with ordinary sized ranges and subordinates usually within a day's march, there should be very little need for anything more than the monthly returns and the reports of crimes; *mutatis mutandis*, the same remarks apply to District Forest-officers. Two rangers and one forester returned from the Forest School, but only one ranger and one forester were sent; this is a matter that needs greater supervision on the part of Conservators if the supply of certificated men is to be in any way adequate to the requirements of the department. The season was much as usual; there was famine in Ganjam and a storm wave in Nellore.

The report, though received late from the districts, was sent in in print by the Conservators on the 2nd and 16th August 1890 from Northern and Southern Circles respectively and has been carefully prepared by them; in it the Conservators have made free use of abstract instead of detailed forms and propose to extend them, but the lists of reserved forests and lands are, in the present shifting stage of Forest Settlement, so useful as a complete record of settlement up to date, that these, the Board thinks, should be retained as they are, at least for a few years more. The report shows, the Board thinks, continued progress on the part of the department.

(True Copies and Extract.)

(Signed) H. A. SIM,
Acting Secretary.

To the Secretary to Government, Revenue Department,
with two reports, three sketch-maps and the
Southern Circle Conservator's report on tramways.
„ Conservator of Forests, Southern Circle.
„ „ Northern „
Copy to the Collectors of all districts, except Madras.
„ „ Examiner of Forest Accounts.

ORDER—dated 24th November 1890, No. 957, Revenue.

Forest, No. 292.

The above Proceedings of the Board of Revenue contain a very careful review of the operations of the Forest Department during the year 1889-90, as detailed in the administration reports of the two Conservators. This review was received in the Government office only seventeen days after the date prescribed for its submission, a result which was due to great punctuality on the part of the Conservators. The preparation of the circle reports within the proper time is, however, rendered difficult by the tardiness of some district officers in submitting their reports, and in future years each Conservator should notice by name any officer, who fails to comply with the rules in this respect.

2. *Area of forests.*—The subjoined table shows the extent of the various classes of forest under the control of the department and the changes that have taken place during the year. At the suggestion of the Conservator, Southern Circle, the Government in G.O., No. 536, dated 10th July 1890, directed the discontinuance of separate returns for leased forests, on the understanding that the fact of the area being held on lease should in each case be clearly noted: this item has accordingly been included under the head of reserved forests in the Southern Circle, but the orders were not received in time for a similar course to be adopted in the Northern Circle.

Class of forests.	Area on 31st March 1889.		Added during the year.	Excluded during the year.	Difference.	Area on 31st March 1890.
	As given in the report for 1888-89.	As since corrected.				
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
A. Reserved under Act V of 1882 ..	631	631	* 194	..	+ 194	825
B. Do. under previous orders ..	..	..	13	..	+ 13	§ 13
C. Reserved lands	6,422	6,422	† 552	‡ 303	+ 249	6,671
D. Leased forests	135	135½	..	..	..	135½
E. Other forests	23	23	..	..	..	23
Total ..	7,211	7,211½	759	303	+ 456	7,667½
Southern Circle.						
Reserved forests	2,817	2,800	119	6	+ 113	2,913
Do. lands	5,281	5,298	337	113	+ 224	5,522
Other forests	‖ 1,646	1,646	98	303	— 205	1,441
Total ..	9,744	9,744	554	422	+ 132	9,876
Grand Total ..	16,955	16,955½	1,313	725	+ 588	17,543½

* The area added is given as 124,280 acres in form 59 A. The Conservator's figure, 195, is thus incorrect. This area was transferred from C.

† Of this 397 square miles have been added during the year and 155 square miles represent correction of areas.

‡ Of this 194 square miles were transferred to A and the rest excluded at settlement and also by rectification of area.

§ Omitted in the last year's return.

‖ Includes forests reserved under previous orders and "other forests."

From this statement, which is similar to the one given in the review of last year's administration, it will be seen that the net additions to reserved forests in both circles were again very small, amounting in all to only 307 square miles; this result is very unsatisfactory and will be further noticed under the head of *Settlement*. The additions to reserved lands were trifling and the figures are greatly swelled by the rectification of areas.

3. In paragraph 5 the Board gives a statement to show the area under the control of the department in each district with its percentage to the uncultivated area. It is more instructive to compare the extent of the reserves with the total area at the disposal of Government, as both the Conservators have done, and the following statement shows this proportion for each district. The figures include leased forests, but exclude forests reserved under previous rules :—

—	Area under control of Forest Department.	Percentage to area at disposal of Government.	—	Area under control of Forest Department.	Percentage to area at disposal of Government.
Northern Circle.	SQ. MLS.		*Southern Circle.*	SQ. MLS.	
Ganjam	545·61	32·43	Chingleput	178·19	16·21
Vizagapatam	24·15	1·44	North Arcot	952·34	37·95
Godávari	1,020·74	43·33	South Arcot	549·40	20·47
Kistna	684·80	27·55	Salem	1,183·66	32·56
Nellore	597·48	23·55	Trichinopoly	236·55	22·31
Cuddapah	2,018·75	36·35	Tanjore	24·95	3·10
Kurnool	1,715·28	39·15	Coimbatore	2,532·49	72·83
Bellary	380·88	18·46	Madura	562·73	34·58
Anantapur	276·37	10·34	Tinnevelly	589·87	46·81
Nilgiris	368·16	55·44	Malabar	601·25	14·19
			South Canara	1,022·93	31·42
Total ..	7,632·22	29·28	Total ..	8,434·36	32·89
			Grand Total of the two Circles ..	16,066·58	31·07

Of the above areas a comparatively small extent has been finally gazetted as reserved forest, and it is probable that after settlement a considerable portion of the remainder will be excluded. But definite proposals have not yet been formulated for each district, and in several localities much forest still remains uncontrolled.. In reviewing the operations of 1886-87, the Government commented on the widely differing areas taken up by the department in the various districts, and directed each Collector to report specially upon the requirements of the country under his charge. The districts, in which an attempt has been made to comply with these orders, are noted in paragraph 6 of the Board's Proceedings, but as remarked in the succeeding paragraph, forest organization is intimately connected with the question of free village forests and pasture grounds, and until recently the policy of Government upon this subject has been undefined. An order * has, however, been issued within the last month discussing in detail the whole of this vexed question, and the lines upon which the selection of forests is in future to proceed, have therein been clearly laid down. It has been decided to abandon altogether the idea of forming village reserves, and the whole area, of which the conservation is desirable, whether for the growth of high timber, for the supply of fuel, or for pasturage, is to be taken up under chapter II of the Act. The following paragraphs of the above-quoted order are given below to facilitate reference :—

* G.O., No. 844, dated 29th October 1890.

"23. The Government is now of opinion that the idea of village forests must be altogether abandoned. There can be little doubt that without constant supervision lands assigned for this purpose would be worked unfairly and would be rapidly denuded of all tree growth. But effective supervision of a vast number of little blocks of forest land dotted over the country would be impossible without an increase of forest establishments so large that its cost would be prohibitive. To preserve the forests then, and to prevent disputes, discontent, and injustice, it is desirable to have the sources of the fuel and fodder supply under Government control, and to minimize expenditure on establishments it is necessary that the reserves should be in fairly large blocks.

"24. One important point is that all Government forests will eventually be formally settled and reserved under the Act. The only objection to this course is that it involves some increased cost, but the advantages of having all rights definitely determined or extinguished are so great as to quite outweigh the extra expenditure. It is, however, most necessary to correct the idea, which prevails somewhat widely, that as soon as a forest is reserved, cattle and men are to be excluded and it is to be worked for the profit of the Government rather than for the benefit of the people. It cannot be too strongly affirmed that the chief object of the reserved forests throughout the greater part of the country is the provision of pasture, small timber, fuel, and leaves for manure or litter. They are to be worked in order to meet the wants of the villagers in these respects and are not to be converted into close preserves for the growth of large timber. The Government cannot lay down any detailed rules for the treatment of the reserves. This must vary with the character of the growth and the circumstances of the locality, but speaking generally the forests in the plains should be worked as fuel and fodder reserves and those on the hills as high forest. Working plans should be drawn out for each and those for the fuel and fodder reserves should contain proposals for throwing open certain areas

to grazing while keeping other portions closed against all heads, and also for felling the fuel departmentally and cutting and storing the grass for sale where such arrangements can be shown to be practicable and most conducive to the convenience and interests of the people. It is the duty of the Conservator to advise the Collector on these matters of detail, and if there is any difference of opinion between these officers, a reference should be made to the Revenue Board whose decision will be final.

"25. The next point for consideration is the area which should be reserved in each district. The Government considers that in the first place all good forest land, however great the extent, should be brought under control. This has already been done in most districts. The Collector should next consider the circumstances of each taluk, which will be the unit for purposes of fuel and fodder reserves. If in any case the area already taken up is not sufficient to furnish the estimated requirements in firewood, leaves and small timber, and to afford grazing for all cattle necessary for agricultural or domestic purposes, more land should, if possible, be brought under management and the natural jungle growth should be supplemented by plantations created for the purpose of fuel supply. Such plantations would be especially beneficial in districts like Bellary and Anantapur and in taluks situated on the coast, for experience has shown that if a large tract of the forest land is carefully enclosed and planted up, a natural growth of grass and shrubs quickly follows the protection afforded by excluding cattle and keeping out fire and the plantation thus becomes both a fuel and fodder reserve."

The adoption of the above policy will in some cases involve the reservation of larger areas than those originally proposed, and it is not possible to estimate with any degree of accuracy the extent of the additions likely to be found necessary. It is probable, however, that the total area of the reserves, as finally constituted, will exceed that now shown as controlled by the department.

4. *Settlement.*—The information required by the Government of India is given in paragraph 8 of the Board's Proceedings, and is reproduced below with slight corrections.

Circle.	Unreserved forest area, 1st April 1889.	Added during year (net).	Total.	Area notified under section 4, 1st April 1889.	Added during year.	Notified under section 16 during year.	Balance notified under section 4 but unsettled.	Total unreserved area on 31st March 1890.
1	2	3	4	5	6	7	8	9
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Northern Circle	6,580½	262	6,842½	6,244	397	194	6,447	6,842½
Southern ,, ...	6,944	19	6,963	2,686	385	* 113	2,95[illegible]	6,963

* NOTE.—This is the net area after deducting the 6 square miles excluded during the year.

The actual area added to the "Reserved Forests" during the year thus amounted to 194 square miles in the Northern and to 113 in the Southern Circle, the total addition being 307 square miles. As pointed out in previous reports, these figures do not represent the actual work accomplished during the year, for extensive areas have been settled and reported upon, although not finally gazetted. His Excellency the Governor in Council is, however, forced to regard the outturn as extremely disappointing; year by year, hopes have been entertained that the succeeding season would show a great improvement in the progress of settlement, and although it is clear that much work has been done, which merely requires some clerical correction to render it complete, the smallness of the areas annually added to the list of reserved forests is most unsatisfactory. The following table shows the outturn of the last seven years:—

Areas notified as reserved forests under Act V of 1882.

——	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	Total.
Northern Circle	..	7	95	373	150	† 6	194	825
Southern ,, ...	683	430	413	312	564	398	113	2,913
Total ..	* 683	437	508	685	714	404	307	3,738

* Constituted under section 25 of the Act.

† This is the net value of the additions; 35 square miles were excluded from reservation in Nellore and 2½ in Nilgiris

From this it will be seen that in spite of the confident anticipations of more speedy progress, the actual outturn of 1889-90 was the smallest recorded since the commencement of operations under the Forest Act. It is indeed worthy of notice, that the total area, gazetted as reserved forest in the Northern Circle, corresponds almost exactly with that treated locally as under reservation prior to the passing of the Act in 1882, and although the figures comprising the latter area were confessedly inaccurate, the actual extent of country, then under control, was probably far in excess of 800 square miles, as all the extensive reserves on the Nallamalais, and many of those on the Nilgiris, were excluded from the calculation. The present returns, however, show that in addition to the 3,738 square miles of forest, for which final notifications have issued, the settlement of 6,400 square miles has been completed, and that for five-sixths of this area reports have been submitted. As the Board points out, the delay in disposing of these notifications was to some extent unavoidable, because the statements of boundaries are frequently of great length and intricacy, and demand careful scrutiny. The report on the progress of work in the Board's office, which was called for in last year's review, is embodied in G.O., No. 135, dated 14th February 1890, and the bulk of the work was then shown to be pending in Collectors' offices. One of the principal causes of delay in the issue of final notifications is the want of good sketch-maps to illustrate the boundaries, and in order to obviate this difficulty, it has recently been proposed to attach a surveyor to the Collector's office in all districts, where the selection of reserves is in progress. The great desideratum of all forest notifications, and especially of one in which a reserve is finally gazetted, is to combine accuracy of definition with clearness of description, and to effect this object a good map of the boundaries is indispensable. The appointment of a number of special surveyors to assist the local Forest officers will, it is hoped, tend to expedite the completion of the settlement, and the Government is glad to learn that four temporary surveyors have already been allotted to the Southern Circle. It is moreover observed with satisfaction, that the meagre results of the year under review will not be repeated in the current year, during which the Board has already passed notifications for 1,270 square miles. All of these have not as yet reached Government; but since the close of the year final notifications have issued for some 850 square miles of country. The outlook is not therefore so gloomy as the returns for 1889-90 would at first sight seem to indicate, but His Excellency the Governor in Council must impress upon all officers concerned the urgent necessity for bringing the work of settlement to a satisfactory and speedy termination.

5. The retention of the special establishment, employed on the duty of Forest settlement, has been sanctioned by the Secretary of State up to the 31st March 1892, subject, however, to the approval of the Government of India. A special report on the work accomplished during the current calendar year, and on that remaining for disposal at its close, has already been called for in G.O., No. 190, dated 10th March 1890.

The total cost of the special Settlement establishment up to 31st March 1890 amounts to Rs. 2,18,706, which gives a rate of Rs. 58 for every square mile finally notified as reserved forest, but no deductions can be drawn from these figures, as they do not include the work done by the ordinary Revenue establishment, and of course do not take into account the extensive areas settled, but not notified.

6. *Demarcation, Survey and Working Plans.*—The Conservator, Northern Circle, has again failed to give the total length of boundary line demarcated during the year, and it is not therefore possible to estimate with any accuracy the average cost per mile for the Presidency. In the Southern Circle the outturn amounted to 1,290 miles at an average cost of Rs. 10-4-11 per mile, as against 1,572 miles demarcated in the previous year, for which the average charge was practically the same. These figures apparently include both preliminary and permanent demarcation, but this point is not clear, and in future reports more definite information must be furnished. A table should be drawn up for each circle to show the length of line demarcated up to, and during, the year in every district, and its total and average cost, the preliminary and permanent work being clearly distinguished. If possible, the work remaining to be done should also be roughly estimated. From the Board's review it appears, that in the Northern Circle 1,500 miles of boundary were finished during the year, exclusive of preliminary work; the total expenditure on demarcation was Rs. 18,251, so that accepting the Board's estimate of outturn as correct, the cost per mile was a little over

Rs. 12 and slightly less than in the preceding year. In neither circle can the work done be considered satisfactory, and from the details given for several districts, it is evident that closer supervision is required in carrying out this important duty. The methods employed appear to differ very materially in the various localities, and the Board, in consultation with the Conservators, should endeavour to lay down some definite rules for the guidance of subordinate officers. In the Board's review of the work done in 1887-88, it was stated that the possibility of adopting some uniform system was under consideration, but no steps have apparently been taken to attain this object. The nature of the country, over which the boundary runs, will of course govern to some extent the methods of demarcation adopted, but it would be well if the principles, on which the work should be carried out, were definitely declared. In this connection the observations made in last year's review should be borne in mind: the views, therein expressed, were approved by the Government of India, with the remark, that "the first object of demarcation is to mark off the boundaries so that they can be easily recognised and be permanently maintained beyond dispute at a small subsequent outlay."

7. The Government of India Survey Party, which is working in the districts of Salem, Madura and Tinnevelly, completed 211 square miles of topographical work. The survey year commences on the 1st September, and the field season extends from that date up to the following March or April. A short account of the operations of the party during the season of 1888-89, and an estimate of its work for 1889-90, are embodied in G.O., No. 3583, Mis., dated 11th June 1890, which is printed at the head of this order. The total area of reserved forests topographically surveyed during these two seasons amounts to 380 square miles (not to 480 square miles as given by the Conservator and the Board), and the average cost per square mile was Rs. 285. This outturn is far below the forecast, and the Government trusts that when the difficulties, encountered by Colonel McCullagh at the outset, have been overcome, the work will proceed more rapidly. Departmental surveys were rightly confined within narrow limits, but a Revenue Survey Party was at work upon several reserves in the Northern Circle. The expenditure on departmental surveys for the last two years is shown in the margin. The figure for the Southern Circle includes a charge of Rs. 4,599 incurred in clearing boundaries for the Government of India Survey Party; this should have been debited to *Demarcation*.

—	1888-89.	1889-90.
	Rs.	Rs.
Northern Circle	1,613	3,743
Southern do.	5,861	6,083
Total ..	7,474	9,826

8. In reviewing the operations of last year, the Government of India remarked upon the importance of working plans, and desired that due prominence might be given to this method of treating the forests. These remarks must be carefully borne in mind, but the Government agrees with the Board that progress in this direction will necessarily be slow. To carry out the work speedily and efficiently, special Working-plan Parties should be formed, and with the Forest Department at its present strength, this is entirely out of the question.

9. *Fire protection.*—The following statement shows the areas protected, and the cost per square mile for the last six years:—

—	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.
	Area attempted to be protected.					
	Sq. mls.	Sq. mls.	Sq. mls.	Sq. mls.	Sq. mls.	Sq. mls.
Northern Circle	720	728	1,168	1,320	1,667	2,700
Southern do.	744	906	1,081	1,250	1,502	1,910
Total ..	1,464	1,634	2,249	2,570	3,169	4,610
	Rate per square mile.					
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Northern Circle	15	9·10	10·16	10·95	8·53	6·13
Southern do.	15·33	12·67	15·54	16·57	13·35	10·57
	15·17	11·08	12·75	13·70	10·81	7·97

The figures must be to some extent inaccurate, until "record maps" can be drawn up for all reserves, and this must await the progress of survey. So far as they go, however, the statistics show a steadily increasing area, within which protection was attempted, and a decrease in the average cost, while in both circles the percentage of success has improved. These results the Government concurs with the Board in regarding as highly satisfactory, and it does not consider that the average charge was at all heavy. The rate for the two circles combined was slightly less than Rs. 8 per square mile, and that for the whole of India, exclusive of Bombay, is given by the Inspector-General of Forests, in his review of Forest Administration for 1887-88, as Rs. 16. In some districts this rate was largely exceeded: the average charge in South Canara was Rs. 52 per square mile, in Salem Rs. 38, in Tinnevelly Rs. 29, and in Malabar Rs. 22, while the rate for the Southern Circle (Rs. 11) was considerably higher than that obtaining in the Northern Circle (Rs. 6). The percentage of failure was again larger in the Northern Circle (7·4) than in the Southern (·7), so that the greater expenditure was accompanied by the better proportion of success. But forests vary so widely in their comparative liability to fire, that any deductions from these statistics must be made with great caution, and it would be unsafe to gauge the quality of the work done entirely by results. In the Ceded Districts, for instance, the hot season is exceptionally long and dry, and it is only natural that there the fires should be far more frequent and injurious, than on the West Coast. In Cuddapah over 80 square miles of forest were burnt, and the Conservator notes that the village headmen are reported not to afford adequate assistance in preventing fires. The forests most liable to attack are, however, situated in thinly populated tracts, and, as remarked last year by the Collector, the village officers and ryots are of the poorest class and cannot be expected to render much help in the *prevention* of fires, though they should, of course, assist in their extinction.

	* Area burnt.	
	1888-89.	1889-90.
	SQ. MLS.	SQ. MLS.
Northern Circle	229	200
Southern do.	52	14
Total ..	281	214

	† Cases of injury to forests by fire.	
	1888-89.	1889-90.
Northern Circle	51	16
Southern do.	33	34
Total ..	84	50

The policy of concentrating upon the larger reserves the temporary establishment, entertained in the dry season, is one which commends itself to Government, and is believed to be generally adopted. The work done in most districts was on the whole good, but in some the operations should be extended. In Salem, where the area of permanently reserved forests already amounts to 643 square miles, only 48 square miles were specially protected, and the Government is glad to observe that the Conservator has drawn the District Forest Officer's attention to the matter: in Coimbatore and Kurnool also it is evident that more protection is needed. The total area shown as burnt * was less than in the previous year, and the number of cases † of incendiarism brought into court was also less.

10. *Offences.*—There was a slight increase in the total number of new cases reported during the year for both circles combined, while in the Northern Circle there was a considerable diminution. His Excellency in Council observes with pleasure, that the remarks made last year have been attended to, and that the power of compounding offences has been more utilized. The percentage of cases compounded should be calculated upon the total number of cases disposed of during the year, and the acquittals and convictions should be compared with the cases actually taken into court. The following table gives the figures for the last two years :—

—		Cases pending.	New cases.	Cases disposed of.	Cases taken into court.	Cases compounded.	Percentage of cases compounded to total disposed of.	Percentage of acquittals to total number of cases taken into court.
Northern Circle ..	1888-89 ..	125	1,733	1,577	1,150	427	27	27
	1889-90.	**281**	**1,355**	**1,478**	**967**	**511**	**35**	**30**
Southern Circle ..	1888-89 ..	173	2,201	2,167	1,270	897	41	26
	1889-90.	**207**	**2,679**	**2,568**	**1,381**	**1,187**	**46**	**28**
Total ..	1888-89 ..	298	3,934	3,744	2,420	1,324	35	27
	1889-90.	**488**	**4,034**	**4,046**	**2,348**	**1,698**	**42**	**29**

The Government agrees with the Board in discrediting the evidence as to premeditated defiance of the law on the part of the public, and awaits the report called for in explanation of the gang of 1,000 people, seen shooting on the slopes of the Nilgiris. The number of offences in Trichinopoly (646) is large, and considering the comparatively small extent of forest in this district must be considered excessive: it is noticed that last year the number was 681: by far the larger proportion in each year was compounded, and probably, as the Board remarks, this was the proper course. The Government is not prepared to accept Colonel Campbell Walker's proposition, that the efficiency of protection generally varies in inverse ratio to the number of offences reported, but any tendency to multiply the number of petty cases should be carefully checked. Both Conservators complain that the protective staff is inadequate, and it is clear that in many localities there are numerous offences committed, the authors of which are never detected; the agency employed is, however, acknowledged to be of doubtful honesty, and the evils, pointed out by Mr. Lodge, would not necessarily be obviated by an increase in establishments. Mr. Peet's remark, that, in order to secure better detection, the Madras Forest Act requires to be amended on the lines of the amendment, recently carried out under India Act V of 1890 in the India and Burmah Forest Acts, is not understood. The annual Administration Report is not the place for the discussion of such questions, but the Government observes, that the Madras Act already provides for the control of timber in transit, irrespective of the source from which it comes. The attention of the Cuddapah Collector should be drawn to his District Forest Officer's assertion that "many of the village officers in villages adjoining the forests are the leaders of the trade in stolen timber."

11. *Grazing.*—There was again a considerable rise in the revenue derived from grazing, the total figure for the year under review being 11 per cent. higher than that for 1888-89. There has, indeed, been a steady increase in the receipts since the year 1885-86, when the total revenue derived from this source was less than half a lakh.* This, as the Board points out, is the natural result of the policy of gradually raising the fees to the sanctioned maximum, and, under the system enunciated in the order quoted in paragraph 3 *supra*, it is probable that the receipts from grazing will continue to rise. At the same time, any sudden increase in the burthens imposed upon cattle-owners must be scrupulously avoided, and in this connection the report called for from Salem, regarding the great increase in receipts in that district, should, in due course, be submitted to Government. His Excellency the Governor in Council entirely concurs in the Board's remarks, regarding the policy of auctioning out grazing on reserved areas: the initial object of imposing a charge upon grazing is not to increase the revenue, but to restrict the number of cattle feeding in the reserves, and so to improve the sources, from which future demands for fodder must be met. Colonel Campbell Walker's proposals would practically result in the rack-renting of all reserved areas, suitable for pasturage, and it is clear that any such policy would be most injurious both to the people and to the forests. The Government is not prepared to raise the scale of fees in respect of alien

	Rs.
* 1883-84	40,138
1884-85	49,237
1885-86	44,363
1886-87	81,203
1887-88	1,05,811
1888-89	1,29,855
1889-90	1,43,845

cattle, but under the new scheme agricultural cattle will be treated more leniently than other animals, the former being in special cases admitted free of charge. The information called for in G.O., No. 314, dated 7th May 1890, regarding the grazing of sheep and goats, has not been furnished; the Conservator, Northern Circle, however, submits a statement in the form prescribed by the Board. This shows that, in many districts, and more especially in Cuddapah, Kistna, Godávari and Nellore, steps have already been taken to preserve forest areas from the damage caused by these animals. The Board's maxim that sheep should be encouraged at the cost of goats, has the entire approval of Government: the special kind of sheep, said by Colonel Campbell Walker to be as injurious as a goat, should, if possible, be treated as one of the species, to which it seems more properly to belong. His Excellency the Governor in Council is glad to learn that the experiments in hay-making in North Arcot were attended with some success.

12. *Reproduction.*—As regards *natural reproduction*, the Government has nothing to add to the Board's remarks. The area of lands on which *artificial reproduction* was undertaken varied very slightly from that under management in the previous year, and the expenditure involved was nearly the same. The following table compares the figures of the two years:—

		Area in Acres.		Cost in Rupees during the year.	
		On 1st April 1889.	On 31st March 1890.	1888-89.	1889-90.
Northern Circle	Plantations	7,144½	7,519¾	14,208	13,979
	Topes	6,865	6,855	2,215	2,125
	Cultural operations	774	1,171½	1,511	2,941
	Total	14,783½	15,546¼	17,934	19,045
Southern Circle	Plantations	11,792	12,044	25,532	25,613
	Topes	18,898	18,888	5,189	4,744
	Cultural operations	3,846	4,203	2,093	2,302
	Total	34,536	35,135	32,814	32,659
	Grand Total	49,319½	50,681¼	50,748	51,791

It is observed that the Conservator, Southern Circle, complains of the way in which prickly-pear is spreading in some of the Coimbatore reserves, and states that, unless early and drastic measures are undertaken to restrict its growth, the fuel and fodder reserves will eventually be covered with this scourge and become inaccessible to man and beast. The experiments made by the District Forest Officer with the object of eradicating the plant were very costly, and it is not stated whether good results were obtained. An invention, called the "scrub exterminator," has been tried in Australia, it is believed, with some success, and the Government has recently obtained a small quantity for experiment. The Commissioners of Land Revenue, to whom some portion of the chemical has been sent, should arrange for its efficacy being tested in Coimbatore.

13. It was observed by the Government of India in its review of last year's working, that improvement fellings were not made on a sufficiently extensive scale. This matter should be prominently noticed in the next annual reports. The accounts given by the Conservators of the results of the various experiments with exotics have been perused by His Excellency in Council with much interest.

14. *Communications and Buildings.*—The expenditure under this head was slightly in excess of that incurred in previous years.* The outturn was better in the Southern Circle than in the Northern, and the Conservator of the latter admits that the work done was insufficient, but complains that the District Officer's hands were tied with other duties. The Government agrees with the Board in considering that there is ample scope for the judicious

	Rs.
* 1886-87	51,719
1887-88	54,854
1888-89	59,841
1889-90	59,937

outlay of money in this direction. The Board's instructions to Conservators to give, with reports of future years, detailed lists of completed buildings are approved: these lists could most conveniently be shown in the form of an appendix. The question raised by the Conservator, Northern Circle, in regard to the Horsleykondah bungalow, should be dealt with in a separate communication.

15. *Tramways.*—Some interesting information on the subject of forest tramways is given in the Northern Circle report, and a note by Mr. Peet, when Acting Conservator, Southern Circle, is also attached as an appendix. The details required by the Government of India cannot, however, be gathered from these reports, and, as the Board points out, it is impossible to make any reliable calculations upon the data furnished. To next year's report both Conservators should attach a statement to show clearly the financial results of working the various tramways. The Government considers that an estimate of 10 per cent. for deterioration would be somewhat over the mark; 6 per cent. would probably be nearer the truth.

16. *Yield and Working.*—The following statement gives, in the same form as that adopted in last year's review, the particulars of the yield of the forests during the last 3 years.

The Board's review of these operations is comprehensive, and the Government has but little to add to it:—

——	1887-88.	1888-89.	1889-90.
	Northern Circle.		
	C. FT.	C. FT.	C. FT.
Timber and fuel	7,775,639	8,935,228	6,996,159½
	RS.	RS.	RS.
Bamboos and minor produce	1,81,653	1,95,248	1,99,381
	Southern Circle.		
	C. FT.	C. FT.	C. FT.
Timber and fuel	7,677,600	9,732,988	9,760,821
	RS.	RS.	RS.
Bamboos and minor produce	3,39,875	3,56,481	3,29,516

From this it will be seen, that during the year under review there was in the Northern Circle a considerable falling off in the outturn of timber and fuel, and a rise in that of bamboos and minor produce, while in the Southern Circle there was an increase in the former and a decrease in the latter. The returns for the Southern Circle do not show the value of bamboos given free of charge, and their value has accordingly been entered at the rate of 4 pies per bamboo, this being the price obtained for confiscated produce. As usual, the major portion of operations were performed by private agency, but a considerable amount of work was done by the department: the following table compares the figures of the last three years:—

Year.	Northern Circle.		Southern Circle.	
	Government agency.	Private agency.	Government agency.	Private agency.
	Timber and Fuel.			
	C. FT.	C. FT.	C. FT.	C. FT.
1887-88	1,003,699	6,680,425	515,240	7,107,480
1888-89	1,128,901	7,691,793	677,912	9,046,612
1889-90	973,208½	6,007,091*	1,049,847	8,703,651*
	Bamboos and Minor Produce.			
	RS.	RS.	RS.	RS.
1887-88	13,089	1,63,727	37,244	3,00,041
1888-89	17,008	1,71,337	67,126	2,89,036
1889-90	15,311	1,83,436*	32,068	2,96,965*

There was no collection of timber by departmental agency in Kistna, Nellore and Kurnool, and in many parts of the Southern Circle, and in most districts the outturn

* Includes drift and confiscated.

of Government work was below that of the preceding year. The returns received from departmental work are clearly more profitable than those accruing from private agency, and the former method has much to recommend it; but the Government fears that the department is at present too weak to undertake extensive operations in this direction, and observes, that on previous occasions, both the Board and Conservators have demurred to the idea of adding to the onerous duties of Forest-officers by imposing upon them the work of direct supervision in these matters.

17. *Financial results.*—The financial results of the year's working are compared below with those of the preceding year:—

	Northern Circle.		Southern Circle.		Total.	
	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	6,16,920	6,06,610	8,98,086	9,51,017	15,15,006	15,57,627
Charges	4,74,542	4,58,330	7,42,132	7,07,028	12,16,674	11,65,358
Surplus ..	1,42,378	1,48,280	1,55,954	2,43,989	2,98,332	3,92,269
Increase over last year ..	5,902		88,035		93,937	

The figures show that there was a net surplus of nearly 4 lakhs of rupees, the largest surplus on record, and the Government agrees with the Board in considering that the results are extremely satisfactory. The districts which yielded the largest revenue were North Arcot, Salem and Cuddapah. The net surplus was highest in North Arcot, amounting to Rs. 1,08,413 exclusive of direction charges: Cuddapah came next with Rs. 75,133, and Salem followed with Rs. 74,056. There were deficits in a few districts, the largest occurring in Ganjam and Nílgiris.

18. *General.*—The year seems on the whole to have been a healthy one, though there was a considerable amount of sickness among the officers of the subordinate staff. The touring of the Conservators and their District Forest-officers was satisfactory. The Board's remarks regarding the curtailment of office work have the entire approval of Government. The completion of the work of verifying service registers in the Southern Circle must be expedited.

19. The operations of 1889-90 cannot be considered as altogether satisfactory. The delay in the work of settlement is a matter demanding serious consideration on the part of all officers concerned, and material improvement in other directions cannot be expected, until this work has been completed. His Excellency the Governor in Council, however, agrees with the Board in viewing the reports of the year as evidence of continued progress. The most satisfactory feature is the steady increase of revenue over expenditure, and His Excellency in Council entirely concurs in the Board's opinion that, at any rate for some years to come, it will be advisable to devote a large share of this surplus to developing the efficiency of the department, and to constructing works of improvement. The inadequacy of the superior staff is being again brought to the notice of the Government of India, and the scheme for reorganizing the subordinate establishments should be submitted at an early date.

20. In conclusion, His Excellency the Governor in Council is glad to be able to congratulate the Conservators on the greater accuracy of the returns, which this year accompany their reports, and fully approves of the endeavours that have been made to consolidate the required information. The Government agrees with the Board that, for the present, the list of reserved forests and lands should be repeated annually, but form 62 showing the tracts protected from fire might with advantage be given in abstract.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

To the Commissioners of Land Revenue.

Copy to the Commissioner of Revenue Settlement, Land Records and Agriculture.

No. 957A.

Copy to the Government of India, Revenue and Agricultural Department.

(Signed) C. A. GALTON,
Secretary to Government.

APPENDIX I.

Letter from A. W. PEET, Esq., Acting Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue, dated Madras, 18th March 1890, No. 3529 :—

[*Subject.*—Cost of working of tramways in North Arcot and South Coimbatore.]

[*Reference.*—Board's Proceedings, No. 656, Mis., Forest, dated 17th July 1889.]

I have the honor to state that, as I have partially explained before, the cause of delay in answering this reference was chiefly because the District Forest-officer, South Coimbatore, wished for time to give statistics based on actual working, when the line had been for some time in tolerable order. Even after the Engineer left, the work was by no means complete, and improvements have been made from time to time by altering the line and taking out unnecessary curves, and the derailment difficulty has been almost overcome by the use of a second guard rail on the inner side of the curves. I visited the Anaimalais again in December to see the timber brought up by the tramway and to examine the condition of the line. I will advert to this later in the general remarks. Mr. Porter's report reached me in camp in South Canara only on the 15th February, and as I wished to verify some of the figures and had much local and current work, I could not take up the question carefully till now. The cost of the feed and keep of elephants differs much from my previous estimate and I wished, among other things, to verify this. I think that the sum now entered is a fair average. The increased expense is because I found that the condition of the elephants on the Anaimalais was very poor, as they were fed on germinating paddy only. Their diet was at once altered to boiled rice and ragi, since which time there has been a marked improvement in their condition.

2. As regards the North Arcot tramway statistics, I am not sure whether the information is sufficiently full. I explained personally to the Acting District Forest-officer what was wanted : but his report is far from full. Perhaps, however, they are sufficient to give a general idea of the working.

NORTH ARCOT TRAMWAY.

The plant was as follows :—

	Number or quantity.	Rate. £ s. d.	Value. £ s. d.
Portable tramway suitable for animal power (system A, page 12, Fowler's Catalogue of Light Railways, No. 43, part IV) with steel rails, steel corrugated sleepers and wrought steel chairs on full width of sleepers, 14 lb. per yard, 2 feet gauge ...	2 miles.	286 0 0	572 0 0
Crossings	2 „	4 12 6	9 5 0
Weighing machine	1 „	...	23 0 0
Wagon type, J (P. 46) ...	5 „	8 0 0	40 0 0
Do. K („) ...	1 „	...	10 10 0
Tool box	1 „	...	4 10 0
		Total ...	659 5 0

	Rs.	A.	P.
The cost according to the returns furnished was cost of plants	9,859	0	11
Cost of freight	956	8	0
Total ...	10,815	8	11

3. During a period of 14 months there were two clearances of coupes by means of the tramway, one from Virinjipuram plantation to the railway station, a distance of $1\frac{3}{4}$ miles, and the other from Vikramasi reserve to the railway station, a distance of $1\frac{1}{2}$ miles. In the first case the road for the tram was carefully prepared because there will be occasion to use it again. In the second the road will not be required again, and it was therefore not so carefully prepared. In the one experiment, therefore, we have a larger expenditure on road work and a smaller proportional expenditure on the cost of removal; and in the other we have a smaller expenditure on road work, but a larger proportional expenditure on the cost of removal, because bullocks had to be employed and their labor supplemented by that of men to assist at the curves. The cases were therefore to some extent typical, and I would advert to this type again in the general remarks.

4. In experiment No. I, $1{,}664\frac{1}{5}$ tons of wood were moved for $1\frac{3}{4}$ miles at a cost of Rs. 91-1-10. In experiment No. II, 723 tons were moved a distance of $1\frac{1}{2}$ miles at a cost of Rs. 106-14-3. The cost in the first case was at the rate of 10 pies a ton, and in the second at the rate of 2 annas 4 pies for actual transport.

5. The general results were—

	Rs.	A.	P.
Experiment No. I—			
(*a*) Cost of road-making, &c.	415	0	3
(*b*) Repairs to road	36	13	3
Total ...	451	13	6
(*c*) Cost of removing $1{,}664_5$ tons for $1\frac{3}{4}$ miles	91	1	10
(*d*) Cost of removing the same quantity by carts at the rate of 4 annas a ton per mile	728	3	0
Savings by means of transport by tramway	637	1	2
Experiment No. II—			
(*a*) Repairs to plant	77	8	0
(*b*) Cost of road	94	1	0
Total ...	171	9	0
(*c*) Cost of removing 723 tons of wood $1\frac{1}{2}$ miles	106	14	3
(*d*) Cost of removing the same quantity by carts at As. 4 a ton per mile	271	2	0
Savings ...	164	3	9

6. The actual cost of plant, repairs, road-making, and laying down of the line for a period of 14 months was Rs. 11,438-15-5. The savings in transport during that period in the removal of $2{,}387\frac{1}{5}$ tons of wood (an average of 170 tons a month or $5\frac{2}{3}$ tons a day) was Rs. 801-4-11.

This is equivalent to a return of 7 pies per cent. on the capital.

7. The outturn of work would be much greater if the line were fixed for a considerable time to one place: but this clearly depends on the nature of the forest and the extent of the operations. During the period in question it was repeatedly shifted in parts. A future working on the roadway prepared from the Virinjipuram plantation will be more economical.

8. *South Coimbatore.*—Government asked how it happened that some expenditure was incurred by the District Forest-officer, North Arcot, for the Anaimalai tramway. The District Forest-officer acted merely as a forwarding agent when arranging for the transport of his own tramway.

As an enclosure, the office-note of the District Forest-officer, South Coimbatore, No. 1807, dated 8th January 1890, with the Collector's endorsement, is attached. The appendix to this office-note giving a statement of expenditure up to date is given as appendix II to this letter.

The plant is described in appendix I.

		RS.	A.	P.
9.	The total cost of plant *plus* freight was	42,692	15	3
	Total cost of transport from the slip to the Anaimalais *plus* sundries was	8,655	4	0
	Cost of preparing the road and putting down the line (up to December) was	7,888	14	7
	Total ...	59,237	1	10

10. Mr. Porter's calculation from actual working was that an elephant dragged 58 cubic feet (on an average) a day up the Mount Stuart ghât to the timber slip, a distance of $3\frac{1}{4}$ miles. We may safely take an elephant's daily load in round numbers at 60 cubic feet.

Mr. Porter further makes a calculation that the saving in the cost of actual working by tramway by an elephant as against the old system of carting by bullocks amounts to Rs. 6-2-0 a day for each elephant for each working day.

11. To put the matter another way, altering the estimates which I gave in a former letter to suit experience better, I would place the annual outturn of the forest at 54,000 cubic feet of timber and the average outturn of work of an elephant at 60 cubic feet per diem for 20 days a month during 9 months. At this estimate it would take 5 elephants to finish the transport.

Allowing for the capture of one or more of the elephants, I would estimate the cost price of each elephant at only Rs. 1,000.

The feed and keep is calculated at a higher rate than before, viz., Rs. 40 a month for each elephant.

We should have then on one side of the account—

	RS.
Interest at 5 per cent. on Rs. 59,300 (cost of tramway, &c.) ...	2,965
Do. on Rs. 5,000 (cost of elephants, &c.) ...	250
Feed and keep of 5 elephants for one year	2,400
	5,615

And on the other—

The cost of carting by bullocks according to the old method of 54,000 cubic feet at Rs. 2 a candy of $12\frac{1}{2}$ cubic feet	8,640
Savings ...	3,025

12. *General remarks.*—Even now the figures are merely approximate and indicative, for we are considering the total cost of 7 miles of tramway and considering the working only over a portion which is now utilized. For an absolute comparison it would be fairer to take the cost of only $3\frac{1}{2}$ miles of line as compared with a working over $3\frac{1}{4}$ miles. However, taking the figures as they stand, I think that there is indication that, notwithstanding the great cost, the experiment will pay financially, for although the cost of laying the line in a hilly country is excessive, yet the savings on a comparison between the new and old styles of transport is also excessive. There are, besides, indirect gains because the work of a season was formerly so problematical as to cause frequent changes in the plan of operations: this was due to the fact that the means of transport was entirely in the hands of the native carting contractor. I still believe that savings can be effected by using ropes round drums as the traction power,

and I have asked Mr. Porter to try the experiment when possible. There is no use dwelling on this point at present in the absence of facts.

13. I have no hesitation in stating the belief that money has been wasted owing to inexperience. The line was first of all laid on the road with as little alterations as possible in the latter: the consequence was that there were an inordinate number of small curves and the general appearance of the construction was very different from what one expected of an iron road of any sort. From the experience now gained I feel convinced that the way should be definitely constructed and laid out before a rail is put down. As a small illustration, I would refer to the typical case in North Arcot where a great part of the cost of construction of a road would have been compensated by a saving in cost of transport.

14. There is another matter, viz., that the cost of repairs would be materially decreased if a road were scientifically laid out in the first instance. Forest-officers have occasionally had considerable practical experience of works of construction, but occasionally they have not, and in the latter case experience is gained often at some cost. For example, I mentioned a visit paid in December to the works. On that occasion there fell a rain almost of cyclonic violence: not less than 10 inches could have fallen in the one burst. The effect was most disastrous, for the line was breached in several places, and some of the bridges carried away. With this abnormal rain some damage would probably have been done to a line constructed by the best of Engineers; but I think that there were indications that part of the damage might have been avoided; for instance, the piers of some bridges were to some extent athwart the waterway and sufficient escape had not been made in other directions.

I mention these facts not as set causes of complaint against Mr. Porter, or his subordinates, for I think that they worked to the best of their knowledge and ability in a very trying piece of country; but in order to draw a moral for future experiments, viz., that I think it would really be a saving of money in the end to obtain in the first instance the assistance of a competent Engineer to mark out and make a road before laying down a tramway in a hilly region: on the level the work is simple enough. The line was partially laid, and the bridges were constructed before I took charge, or I should have urged this course before the work of laying the rails commenced. The benefit gained from the employment of the Engineer was rather neutralized by the fact of the inappropriateness of the road. We have now three officers—Mr. Porter, Mr. Moss, Sub-Assistant, and Mr. Ryan, Forester—at least, who can lay a line practically, and much improvement to the road-way has been effected during the last few months of the year. Mr. Marshall, Sub-Assistant, also did much practical work at the commencement. If it is decided at any future time to lay down another tramway in a hilly region, the services of a Consulting or Superintending Engineer would be of more use than those of a Mechanical Engineer.

15. There is another point on which experience has been gained both in bending rails and in making curves with straight rails. Experience has also been gained in the construction of brakes, for the special brake carriages sent out have proved useless. Some other portions of the plant would not be ordered again.

16. The best price of experience which has been gained, however, is in preventing derailments, and the method of avoiding this has been found to consist in a second rail fitted parallel to the inner rail of the curve. I think that Mr. Moss first put this practically to the proof. It is still thought, however, that the flanges of the wheels should be deeper for hill tramways.

ENCLOSURE.

Office-note from J. H. PORTER, Esq., District Forest-officer, Coimbatore (South), to the Conservator of Forests, Southern Circle (through the Collector of Coimbatore), dated Coimbatore, 8th January 1890, No. 1807.

[*Subject.*—Tramway.]

1. Enclosed is a tabular statement showing the cost of the tramway up to date.

2. The derailment difficulty has been overcome by fitting on all curves a third rail without which, owing to the short radii of the curves and to the shallow flanges of the wheels, it was found absolutely impossible to prevent derailments occurring from time to time.

3. Four miles of line (this does not include one mile of line temporarily put down up the ghât for the purpose of bringing up the plant) are now laid from the top of the new slip to Pillitaniparai where most of the timber is stacked and I do not intend to lay down the remaining two miles this year as we shall not be able to get out the timber already reached during the current working season.

4. It was only at the beginning of November that the experiment of fitting an extra rail on the curves was tried: before this, derailments were constantly occurring and much time was wasted. From October 29th to December 7th, 104 trips were made by the elephants and the amount of timber transported was 6,102 cubic feet, the average distance being 3½ miles from the depôt to the top of the slip. The average load per elephant per diem was therefore 58 cubic feet or 4·6 candies (12½ cubic feet). The average cost of an elephant is Rs. 40 per mensem (this includes feeding charges and pay of mahout and cavady); an elephant works 20 days a month and the working season lasts on an average from 1st June to the end of February; the actual cost of an elephant per working day is therefore $\frac{40 \times 12}{20 \times 9} = 2\frac{2}{3}$ rupees; to allow for sickness, &c., the cost may be taken at Rs. 3 per working day. The actual cost of removing the average load of 58 cubic feet or 4·6 candies is therefore 3 rupees; the charge previously paid for cutting the same distance was Rs. 2 per candy or Rs. 9-2-0 for a load of 4·6 candies. Since the line was first laid down the gradients have been very much improved and a great number of curves taken out: the consequence is that a pair of average bullocks can remove the smaller and medium sized logs, but as the owners charge at the rate of Re. 1 a candy, the employment of Government elephants is more economical. The heaviest load taken by one elephant in a pair of trucks was 108 cubic feet.

5. There is not the slightest doubt that, as further experience is gained, the outturn of work will increase very considerably. Great difficulties had to be overcome and we are only just beginning to work the line regularly. The heavy rain which fell on December 19th and 20th washed away several bridges and about 15 to 20 yards of embankment: the repairs will be completed this week.

Endorsement by the Collector of Coimbatore, dated 28th January 1890.

Forwarded.

This paper has been unnecessarily delayed in this office. Haulage by elephants as against haulage by bullocks, even on the tramway, is economical, even if deterioration of, and money invested in, the elephants is taken into account.

I am told that it is everywhere the custom to work elephants only 20 days in a month and presume there is a reason for this: but work on the tramway is immeasurably easier for the elephant than work on the old road and probably there could be more working days in a month than 20.

When the money sunk in the tramway is taken into consideration, the increase of out-put of timber is, of course, much to be studied.

APPENDIX II.

Cost of plant for the Anaimalai Tramway.

	£	s.	d.
1. Seven miles of portable railway suitable for animal power, system A page 12 with steel rails, steel corrugated sleepers and wrought steel chairs, riveted on full width of sleepers 14 lb. per yard 2 feet gauge at £286 per mile.	2,002	0	0
2. Five crossings at £4-12-6	23	2	6
3. One portable turn-table 3′ diameter	5	0	0
4. One weighing machine 3′ 6″ square	23	0	0
5. Twenty-five wagons, type H.H., at £12	300	0	0
6. Tool box	4	10	0
7. Four eccentric tongs at 16*s.*	3	4	0
8. Extras	139	3	6
Total ...	2,500	0	0

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MADRAS PRESIDENCY,

FOR THE

OFFICIAL YEAR

1890-91.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE SOUTHERN CIRCLE, MADRAS,

FOR THE YEAR 1890-91.

By Colonel I. CAMPBELL WALKER, Staff Corps, Conservator of Forests.

CHAPTER I.

Introductory Remarks.

Colonel I. Campbell Walker was in charge throughout the year. He visited all the districts in the Circle and submitted inspection notes to Collectors and the Board. Special subjects, notably the revision of subordinate establishments, requiring personal discussion with Collectors and District Forest-officers, received attention.

2. The District Forest offices of Chingleput and South Canara were inspected by the Examiner of Forest Accounts and those of North Arcot, South Arcot, Salem, North Coimbatore, South Coimbatore, Madura and South Malabar by the Treasury Deputy Collectors of the respective districts.

The Conservator also inspected some of the District Forest offices during his tours, and communicated results to the Examiner of Forest Accounts and the Collectors concerned.

District Forest-officers as a rule appear to have paid sufficient attention to the inspection of Range offices.

3. The time spent in camp by District Forest-officers during the year was on the whole satisfactory, the average being over half the time in charge. In certain cases, however, District Forest-officers appear to have spent more time at head-quarters in revising settlement records, &c.

CHAPTER II.

AREAS AND BOUNDARIES.

4. *Areas.*—The changes during the year in the areas of the several classes of Government Forest lands are briefly summarised in the following table:—

ABSTRACT A.—Classes and areas of forests.

Class of forests.	Area on 31st March 1890.	Added during the year 1890-91.	Excluded during the year 1890-91.	Difference.	Area on 31st March 1891.	Source or cause of increase or decrease.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	
Reserved forests	2,913	387	27	+ 360	(*a*) 3,273	378 square miles transferred or added from reserved lands; 9 square miles added and 27 square miles deducted owing to rectification of areas.
Reserved lands	5,521	357	450	— 93	(*b*) 5,428	Added 336 square miles from "other forests" and 21 square miles in rectification of areas; deducted 378 square miles transferred to reserved forests, 68 square miles at settlement and in rectification of areas, and 4 square miles decreed in favour of the Zemindar of Tevaram, Madura District.
Other forests	1,441	186	387	— 201	1,240	Added 186 square miles new areas; deducted by transfer to reserved lands 336 square miles and by rectification of areas 51 square miles.
Total ..	9,875	930	864	+ 66	9,941	

(*a*) Includes Tekadi leased forests in South Coimbatore, 26 square miles, and 4 blocks of leased forests in South Malabar aggregating 11 square miles.

(*b*) Includes 12 blocks of leased forests in South Malabar aggregating 18 square miles proposed to be constituted reserved forest.

The addition under "other forests" is chiefly due to new areas selected in the Madura district for reservation.

5. The lines under which further areas are to be brought under the control of the department have been indicated in Government Order, No. 844, dated 29th October 1890—Board's Proceedings, No. 707, dated 16th December 1890.

The usual abstract showing district and reserved areas, &c., is appended for general information:—

ABSTRACT B.—District areas and forest reserves in square miles.

Districts.	Total area excluding Feudatory and Tributary States as per Board's Procs., dated 10th December 1890 (Settlement, L. Rds. and Agri).	Area excluding zemindaris and whole inam villages.	Cultivated area.	REMAINDER.			FORESTS UNDER THE CONTROL OF FOREST DEPARTMENT.	
				Uncultivated and forest areas.	Area for which returns are not available.	Total of columns 5 and 6.	Reserved forests under Act V of 1882.	Reserved lands.
1	2	3	4	5	6	7	8	9
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Chingleput	2,841	2,052	956	1,096	..	1,096	126	56
North Arcot ..	7,496	3,765	1,277	2,491	..	2,491	430	523
South Arcot ..	5,140	4,860	2,272	2,588	..	2,588	148	662
Salem	7,471	5,330	1,972	3,358	..	3,358	684	570
Trichinopoly ..	3,631	2,684	1,635	1,049	..	1,049	141	95
Tanjore	3,741	2,485	1,686	799	..	799	9	16
Coimbatore	7,865	7,173	3,716	3,270	187	3,457	685	1,848
Madura	8,800	3,190	1,590	1,202	398	1,600	379	114
Tinnevelly	5,392	3,518	2,270	1,248	..	1,248	428	162
Malabar	5,580	5,557	1,454	4,103	..	4,103	158	442
South Canara ..	3,902	3,883	632	3,251	..	3,251	85	940
Total ..	61,859	44,500	19,460	24,455	585	25,040	3,273	5,428

Districts.	Forest under the control of the Forest Department—*cont.*			Percentage of column 10 to column 3.	Percentage of column 10 to column 7.	Percentage of column 12 to column 3.	Percentage of column 12 to column 7.
	Total of Forest Reserves, columns 8 and 9.	Unclassed or other forests.	Total of columns 10 and 11.				
	10	11	12	13	14	15	16
	SQ. MLS.	SQ. MLS.	SQ. MLS.				
Chingleput	182	22	204	8·9	16·8	10·0	18·7
North Arcot	953	..	953	25·2	38·2	25·2	38·2
South Arcot	810	258	1,068	16·6	31·2	21·9	41·2
Salem	1,254	229	1,483	23·5	37·3	27·8	44·1
Trichinopoly	236	42	278	8·7	22·5	10·3	26·5
Tanjore	25	41	66	1·0	3·3	2·6	8·2
Coimbatore	2,533	2	2,535	35·5	73·3	35·3	73·3
Madura	493	294	787	15·5	30·9	24·6	49·1
Tinnevelly	590	17	607	16·7	47·3	17·2	48·6
Malabar	600	335	935	10·7	14·6	16·8	22·7
South Canara	1,025	..	1,025	26·4	31·5	26·3	31·5
Total ..	8,701	1,240	9,941	19·6	34·8	22·3	39·7

The net increase in the area of reserved forests amounted to 360 square miles and the net decrease in that of reserved lands is 93 square miles. The total area of both classes of reserves on 31st March 1891 amounted to 8,701 square miles against 8,434 square miles on 31st March 1890. The net increase in the total forest area of all classes including "other forests" (*i.e.*, other than those classed as reserved forests and lands) under the control of the department amounted, however, to only 66 square miles during the year, notwithstanding an addition of 186 square miles of new areas under "other forests," the reason for the net decrease being the exclusion of large areas in rectification of errors in previous estimates, as surveys and maps render more accurate calculations possible.

6. *Reserved Forests.*—The areas finally constituted reserved forests in each district are as follows:—

Abstract C.—Reserved forests in square miles.

Districts.	Up to 1889–90.	During 1889–90.	During 1890–91.	Total.
1	2	3	4	5
Chingleput	92	1	33	126
North Arcot	369	8	53	430
South Arcot	94	25	29	148
Salem	598	45	41	684
Trichinopoly	136	1	4	141
Tanjore	8	1	..	9
North Coimbatore	119	..	..	119
South Coimbatore	566	..	..	566
Madura	327	21	49 / — 18	379
Tinnevelly	287	8	133	428
North Malabar	118	..	1	119
South Malabar	39	..	..	39
South Canara	47	3	35	85
Total ..	2,800	113	378 / — 18	3,273

The total area at the end of the year amounted to 7·3 per cent. of the district area excluding zemindaris and inam villages.

In Madura 18 square miles are deducted on account of recomputation of areas reserved in previous years.

It will be seen from the above statement that somewhat better progress in the final constitution of reserved forests was made during the year, but there is still much room for improvement in this respect.

In addition to the area added for the year, 17 blocks aggregating 16 square miles were finally notified before its close, but as the date from which reservation took effect falls within the current year, they are not included in the return of reserved forests for 1890–91.

7. *Reserved lands under settlement.*—The following table shows the progress of settlement up to the end of the year in blocks and square miles:—

ABSTRACT D.—Forest Settlement.

Districts.	UNDER SETTLEMENT UP TO 1889–90.		ADDED DURING 1889–90.		ADDED DURING 1890–91.		TOTAL UNDER SETTLEMENT.	
	Block.	Area.	Block.	Area.	Block.	Area.	Block.	Area.
1	2	3	4	5	6	7	8	9
Chingleput	47	131	32	25	12	5	91	161
North Arcot	85	733	7	125	2	15	94	873
South Arcot	85	305	..	108	28	246	113	659
Salem	105	966	3	16	18	134	126	1,116
Trichinopoly	74	197	..	..	..	..	74	197
Tanjore	24	19	..	..	..	..	24	19
North Coimbatore	10	776	..	..	3	502	13	1,278
South Coimbatore	10	566	..	..	..	..	10	566
Madura	94 / *a* — 13	500 / *b* + 3 / — 27	..	..	..	..	81	476
Tinnevelly	39	589	..	..	..	..	39	589
North Malabar	13	261	..	..	..	..	13	261
South Malabar	21	299	..	..	..	..	21	299
South Canara	22	144	5	8	..	..	27	152
Total ..	629 / *a* — 13	5,486 / *b* + 3 / — 27	*c* 47	282	63	902	726	6,646

District.	FINALLY SETTLED UP TO 1889–90.		FINALLY SETTLED DURING 1889–90.		FINALLY SETTLED DURING 1890–91.		TOTAL FINALLY SETTLED.	
	Block.	Area.	Block.	Area.	Block.	Area.	Block.	Area.
	10	11	12	13	14	15	16	17
Chingleput	17	92	3	1	39	33	59	126
North Arcot	38	369	6	8	6	53	50	430
South Arcot	22	94	4	25	18	29	44	148
Salem	66	598	4	45	8	41	78	684
Trichinopoly	31	136	2	1	6	4	39	141
Tanjore	16	8	1	1	..	..	17	9
North Coimbatore	6	119	..	..	..	..	6	119
South Coimbatore	9	566	1	..	..	..	10	566
Madura	73 / *a* — 12	327	3	21	9	31	73	379
Tinnevelly	5	287	16	8	8	133	29	428
North Malabar	6	118	..	..	1	1	7	119
South Malabar	6	39	..	..	..	..	6	39
South Canara	13	47	1	3	2	35	16	85
Total ..	308 / *a* — 12	2,800	41	113	97	360	434	3,273

a. Due to grouping of blocks.
b. Due to recomputation of areas.
c. Excluding one block twice entered in previous year's return.

8. The position of the balance still under settlement is shown in the following abstract:—

ABSTRACT E.—Statement of settlement balance.

Districts.	Of those notified in														Total balance.	
	1884-85.		1885-86.		1886-87.		1887-88.		1888-89.		1889-90.		1890-91.			
	Block.	Area.	Block.	Area.	Block.	Area.	Block.	Area.	Block.	Area.	Block.	Area.	Block.	Area.	Block.	Area.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Chingleput	..	..	..	..	3	8	2	6	2	2	13	14	12	5	32	35
North Arcot	..	..	..	..	..	..	33	253	2	50	7	125	2	15	44	443
South Arcot	..	..	8	159	9	15	9	11	15	80	..	..	28	246	69	511
Salem	..	7	69	1	16	1	8	8	48	10	141	3	16	18	134	48	432
Trichinopoly	..	..	..	1	3	5	35	..	..	29	18	..	..	..	..	35	56
Tanjore	..	..	..	..	..	1	7	2	3	4	..	..	..	..	..	7	10
North Coimbatore	..	..	..	..	..	..	..	2	470	2	187	..	..	3	502	7	1,159
South Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madura	..	..	..	..	..	2	35	3	50	3	12	..	..	..	..	8	97
Tinnevelly	..	..	..	3	127	..	..	7	34	..	..	..	..	..	..	10	161
North Malabar	..	3	102	3	40	..	..	..	..	..	..	..	..	..	..	6	142
South Malabar	..	..	..	..	..	..	..	10	19	5	241	..	..	..	..	15	260
South Canara	..	..	..	2	35	3	21	..	..	1	2	5	9	..	..	11	67
Total	..	10	171	18	380	24	129	76	894	73	733	28	164	63	902	292	3,373

Districts.	Classification of settlement balance.											
	Settled and reported on.								Settled but not reported on.		Settlement proceeding.	
	Notified under section during 1890-91, but reservation coming to force in 1891-92.		With Board or Government awaiting publication of notification under section 16.		Returned by the Board for revision and remaining either with Collectors, District Forest-officers or Forest Settlement-officers.		Total settled and reported on.					
	Block.	Area.	Block.	Area.	Block.	Area.	Block.	Area.	Block.	Area.	Block.	Area.
	18	19	18 *a*	19 *a*	18 *b*	19 *b*	18 *c*	19 *c*	20	21	22	23
Chingleput	..	3	6	11	15	..	..	14	21	1	4	17	10
North Arcot	..	2	5	23	126	10	172	35	303	9	140	..	..
South Arcot	..	1	..	14	28	11	125	26	153	22	161	21	197
Salem	..	..	..	11	114	9	71	20	185	5	77	23	170
Trichinopoly	..	11	5	15	22	..	..	26	27	3	2	6	27
Tanjore	..	..	..	..	..	2	..	2	..	5	10	..	..
North Coimbatore	..	..	..	3	377	..	..	3	377	1	280	3	502
South Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..	..
Madura	..	..	..	7	91	..	..	7	91	1	6	..	..
Tinnevelly	..	..	..	9	154	1	7	10	161	..	..	..	..
North Malabar	..	..	..	1	3	..	..	1	3	5	139	..	..
South Malabar	..	..	..	..	..	..	..	..	..	10	19	5	241
South Canara	..	..	..	2	8	..	..	2	8	9	59	..	..
Total	..	17	16	96	938	33	375	146	1,329	71	897	75	1,147

The work remaining to be done in regard to the blocks returned for revision is chiefly the correction of details in the claim registers, sketch-maps and boundary descriptions.

The submission of final reports in regard to 71 blocks embracing an area of 897 square miles shown as balance "settled but not reported on" is delayed pending either results of appeals to higher courts against Forest Settlement-officers' decisions, or preparation of correct sketch-maps to accompany the notifications. The Government has lately sanctioned an establishment of temporary surveyors and draftsmen to expedite the latter work.

In some cases, *e.g.*, in South Arcot the final reports on most of the blocks appear to have been delayed pending exchanges of lands, &c., as advised during settlement or expiration of appeal time.

In regard to forest appeals in North Malabar, the Collector reports that of the six forest cases which were pending on second appeal before the High Court, three have been decided against Government. The remaining three were remanded to the District Court, Tellicherry, for revised findings. In two of these, findings wholly favorable and in one, partially favorable to Government, have been submitted.

The settlement of the Amarampalam forest in South Malabar, referred to in the last annual report, was nearly complete at the close of the year and only awaited decision of the Forest Settlement-officer in the matter of a claim to the right to capture elephants alleged to have been granted by the jenmi prior to the purchase of the forest by Government.

The settlement of the Attapadi valley block was delayed as the Forest Settlement-officer, Mr. Castlestuart Stuart, was unable to devote the necessary time and attention to it owing to the pressure of revenue settlement work.

9. Of the two Deputy Collectors, Messrs. A. Pinto and W. C. McMurray, who were special Forest Settlement-officers at the beginning of the year, the former was, at his own request, relieved of forest settlement work in September 1890, and M.R.Ry. C. Raju Sastri Avergal appointed instead. Mr. Pinto was, however, directed to continue to be Forest Settlement-officer for the Chingleput district in addition to his ordinary duties as Deputy Collector. Mr. McMurray had charge of the forest settlement of Salem and North Arcot districts, while M.R.Ry. C. Raju Sastri Avergal had that of South Arcot, Trichinopoly, Tanjore, Coimbatore, Madura and Tinnevelly districts.

The work performed during the year by the Special Forest Settlement-officers was as follows:—

ABSTRACT F. —Outturn of work by Special Forest Settlement-officers.

——	Issue of proclamation after notification under section 4.		Settlement of claims.		Report after Settlement submitted.		Final notification proclaimed.		Cost.
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	
1	2	3	4	5	6	7	8	9	10
		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.	RS.
Mr. W. C. McMurray	19	135	21	222	4	68	16	107	7,862
,, C. Raju Sastri	31	746	26	329	12	390	52	218	11,335
,, A. Pinto	12	5	17	10	20	24	44	40	* ..
Total outturn of work during 1890–91	62	886	64	561	36	482	112	365	19,197
Outturn during 1889–90	42	304	42	705	62	74	51	109	17,066
Difference for the year under report	..	+ 582	..	− 144	..	+ 408	..	+ 256	+2,131
Percentage of difference ..	..	+ 191	..	− 20	..	+ 551	..	+ 235	+ 12

* The cost is included in Rs. 11,335 shown against his successor's (M.R.Ry. C. Raju Sastri Avergal's) name.

The results are better than in the previous year, but cannot be regarded as satisfactory.

The cost of Forest Settlement during the year amounted to Rs. 19,257 (including Rs. 60 on account of temporary establishment employed under Mr. Castlestuart Stuart, Forest Settlement-officer, Malabar), against Rs. 18,307 in the preceding year, in which there was no second special Forest Settlement-officer for a few months. The total cost since the commencement of settlement up to the end of the year amounted to Rs. 1,67,458.

The total area constituted reserved forest up to the end of the year is 3,273 square miles (as per abstract C) and by adding to it 1,329 square miles being the "settled and reported on" balance on 31st March 1891 (column 17, abstract E), we have 4,602 square miles. Each square mile settled has thus cost on an average Rs. 36, the average up to the end of the preceding year being Rs. 35. This does not include the cost of demarcation and survey.

10. *Reserved Lands not under Settlement in square miles.*—The following table shows—

(*a*) addition to the area of reserved lands,
(*b*) areas transferred for settlement as reserved forests, and
(*c*) the balance remaining as reserved lands.

ABSTRACT G.—Reserved Lands not under Settlement.

District.	Up to 1889-90.	Added during 1889-90.	Added during 1890-91.	Total.	TRANSFERRED FOR SETTLEMENT. Up to 1889-90.	During 1889-90.	During 1890-91.	Total.	Balance remaining as reserved lands not under settlement.
1	2	3	4	5	6	7	8	9	10
Chingleput	153	24	5	182	131	25	5	161	21
North Arcot	911	42	..	953	733	125	15	873	80
South do.	305	244	261	810	305	108	246	659	151
Salem	1,168	16	70	1,254	966	16	134	1,116	138
Trichinopoly	236	..	..	236	197	..	..	197	39
Tanjore	25	..	..	25	19	..	..	19	6
North Coimbatore	1,952	— 3	..	1,949	776	..	502	1,278	671
South do.	584	..	..	584	566	..	..	566	18
Madura	(*a*) 563 — 19	..	(*a*)—51	493	500 +(*a*) 3 — 27	...	..	476	17
Tinnevelly	590	..	..	590	589	..	..	589	1
North Malabar	281	— 8	..	273	261	..	..	261	12
South do.	327	..	..	327	299	..	..	299	28
South Canara	1,025	— 1	..	1,024	144	8	..	152	872
	8,120 (*a*) —19	314	336 (*a*)— 51	8,700	5,486 (*a*)+ 3 — 27	282	902	6,646	2,054

(*a*) Due to recomputation of areas.

The area, viz., 336 square miles, added to reserved lands during the year, consists of 15 square miles in South Arcot constituted under the rules under section 26 of the Act, and 321 * square miles notified for settlement under section 4.

* Chingleput	5
South Arcot	246
Salem	70
Total	321

The latter area was transferred from Reserved Lands for settlement within the year besides 581 † square miles so transferred from areas of reserved lands constituted in previous years. The area of reserved lands not yet placed under settlement amounted to 2,054 square miles at the close of the year.

† North Arcot	15
Salem	64
North Coimbatore	502
Total	581

The unclassed or "other forests" as far as they were recorded, showed a balance of 1,240 square miles on 31st March 1891. Further areas are now being recorded with reference to Government Order, No. 844, dated 29th October 1890, but the selection of these new areas cannot be expected to proceed rapidly and satisfactorily unless the District Forest-officers concerned are relieved of their routine duties.

11. *Boundaries.*—The following lengths are reported to have been taken in hand for demarcation:—

—	Miles.	Cost.	Average.
1	2	3	4
		RS.	RS. A. P.
Up to 1889-90	7,585	71,786	9 7 5
During 1889-90	1,290	13,297	10 5 0
During 1890-91	1,631	20,242	12 6 7
Total	10,506	105,325	10 0 5

The information called for by Government in its review on the last annual report in regard to preliminary and permanent demarcation in each district since the commencement up to date will be furnished next year, as the particulars to hand from

District Forest-officers are not in most cases sufficiently complete or accurate for the purpose intended, and require careful scrutiny. Meanwhile the length demarcated during the year may be considered more or less permanent, with the exception of 100 miles in South Canara reported to be preliminary demarcation purely for the purpose of settlement.

The increase in the average cost is due to more effectual clearing of lines and the erection of substantial boundary marks (stone cairns) in most districts. In North Arcot, notices were served on 10 owners of private forests to clear their boundaries. None of them did so except the Mahunt of Tirupati and another Poligar. The work was therefore begun departmentally, the charges being recoverable from parties concerned.

In South Arcot, the boundary of the jaghir of Kurumbagoundennád (Kalroyen hills), running contiguous to the southern boundary of the Tiruvannámalai taluk, was cleared by the department to a length of nearly 10 miles and to a width of 6 yards at a cost of Rs. 327 recoverable from the jaghirdar.

In Salem, notices were served on 4 owners of private estates to cut and clear their boundary lines adjoining Government forests. Three of them had not completed the work at the close of the year, and in the case of the fourth (Chinna Kalroyen jaghirdar), the work was ordered to be done departmentally.

In Madura, the final demarcation of the southern boundary of Yersakanayakanur zemindari was not completed. After very great delay, the zemindarni wrote expressing her willingness to abide by the boundary demarcated in a preliminary manner by Mr. Gass. She was then requested to send her share of the estimated cost of the permanent work, but had not done so up to the close of the year.

A portion of the Ayakudi zemin boundary was finally corrected by the Survey Department in favour of Government, and an appeal against it was preferred to the district, but rejected with costs.

In North Malabar, the demarcation of the 13 blocks of Kudrakote reserved forest is not complete. The work actually done during the year is included in the above abstract.

In South Malabar, the demarcation of the new Amarampalam forests was still delayed at the close of the year for want of a special ranger for the work, as explained in the last annual report.

The demarcation of the Chenat Nair reserved forest in Pálghat range was completed by Forest Ranger Mr. Van Haeften.

CHAPTER III.

SURVEYS AND WORKING PLANS.

12. Surveys have cost Rs. 80,813 during the year, *i.e.*, Rs. 70,564 for the Survey of India Party and Rs. 10,249 for Departmental surveys, &c.

The approximate figures of the total outturn of work by the Government of India survey party during the season 1890–91 are reported by the Deputy Superintendent in charge of the party as follows :—

District.	Triangulation, Square miles.	Traversing, Linear miles.	Topography, Square miles.
Coimbatore	800	34·3	..
Madura	250	93·7	168·3
Tinnevelly	Supplementary.	146·3	271·8
Total ..	1,050	274·3	440·1

The outturn of work (topography in particular) during the year is more satisfactory, being 60 square miles in excess of that of the two previous years put together. The cost per square mile shows also an appreciable decrease.

The whole question of cost was fully discussed at a conference held in the Revenue Board's office at Madras in April last, at which the Surveyor-General was present. The conclusions arrived at were chiefly to the effect that expenditure could not be reduced, but that outturn of work could be increased, the working season to be not less than 6½ months, commencing and ending rather earlier than at present.

In North Arcot, one proposed reserve, Alwartirtam block, Chandragiri taluk, was surveyed by a temporary surveyor employed by the department and maps of 23 blocks, notified under section 4 and duly settled, were prepared.

In South Arcot, the outline, as well as the interior lines and admitted enclosures of Fort Saint David, Shonankuppam and Doni Durai blocks (casuarina plantations) in No. IV, Cuddalore range, were surveyed departmentally, and accurate maps on a scale of 16 inches to the mile, showing full details as to blanks and areas of different years' planting, prepared for purposes of working plan for the coast plantations.

In Salem, Trichinopoly and Tanjore, the services of temporary surveyors employed were chiefly utilized in preparing accurate sketch-maps of proposed reserves. In South Coimbatore a temporary surveyor was employed for a few months in connection with the revision of the Bolampatti working scheme, &c.

In Madura and Tinnevelly, clearing of lines for survey purposes was carried on satisfactorily at a cost of Rs. 3,441 and Rs. 2,730, respectively. In the former, the lines embraced 19 blocks of forests with an area of 144 square miles, whilst in the latter the clearing was chiefly confined to the Tinnevelly-Travancore boundary (70 miles in length) besides interior lines and pathways.

In accordance with the orders of Government, the survey of the Kotagudi valley in Madura, the control over certain forests of which it is proposed to obtain, was carried out with the help of a Deputy Surveyor lent to the department for the purpose. The boundary traverse was completed at a cost of Rs. 1,129; no topographical work was done.

In South Canara, departmental survey work went on as usual and about 76 square miles were mapped. The work was partly the mapping of demarcated blocks, and partly in advance of selection.

The areas reported as surveyed departmentally up to the end of the year are as follows:—

——	Square miles.	Cost.	Remarks.
1	2	3	4
		Rs.	
Up to 1889-90	1,449	17,839	
During 1889-90	75	6,083	Includes Rs 4,599 expended on line clearing for survey by the Government of India party.
During 1890-91	76	10,249	Includes Rs. 6,171 expended on line clearing for survey by the Government of India party and Rs. 1,129 for the survey of the Kotagudi valley.
Total ..	1,600	34,171	

The Madras survey maps of Kodaikánal settlement and of the Pálni hills were not received. The decision of the Deputy Superintendent of Madras Survey in regard to the disputed boundary of Kodaikánal shola, referred to in the last annual report, has never been communicated to this department, notwithstanding several reminders sent to the Survey Department by the District Forest-officer.

13. *Working plans.*—In Chingleput, no real progress was made during the year. Compartment lines were marked in the Ambakkam, Aradur and Palavakkam reserves. The District Forest-officer's hands were otherwise full. He was, therefore, unable to rectify the defect in the proposed working plan for the Kambakkam reserve, &c., referred to in the last annual report.

In North Arcot, the Conservator was much disappointed to find during his last inspection, that certain important suggestions made by him during a previous inspection in regard to the formation of working circles for supply of fuel to railways, &c., had been entirely lost sight of, and even the working scheme for felling and replanting the casuarina plantations largely deviated from without any authority. The Collector has been duly informed of this fact, and the present Acting District Forest-officer, Mr. Marshall, who is doing his best to rectify matters, has undertaken to draw up for the Conservator's approval a new working scheme for the plantations and reserves.

In South Arcot, an enumeration of the growing stock of the undermentioned blocks was made during the year at a small cost in view to framing a working scheme:—

	Trees from seed.	Trees from coppice.
Fort Saint David	26,013	2,075
Shonankuppam	39,228	33,986
Total ...	65,241	36,061

In Trichinopoly, the sanctioned working plan of the Cauvery south bank plantations is reported to have been adhered to.

In Salem, the felling of produce in the Bargúr reserved forest under coupe system was started in the latter part of the year as desired by the Conservator, but the working plan for the Morur block had been deviated from without authority.

In South Coimbatore, the revision of the working plans, referred to in the last annual report, received attention and is expected to be completed during the current year.

The working scheme for the Sholakarai block was revised during the year. Its provisions have been strictly adhered to, and the result is most satisfactory. The three coupes (total area 128 acres) felled over during the year for fuel poles, &c., yielded a revenue of Rs. 2,274. The rotation being 12 years, the revenue per acre per annum amounts to 1·48 rupees. For bamboos 7 coupes (total area 254 acres) were felled over, which yielded a revenue of Rs. 1,076; the rotation for bamboos being four years, the revenue per annum per acre amounts to 1·05 rupees.

The working plan for some of the forests in Pollάchi No. 2 range, drawn up by Mr. Porter and experimented with, has yet to be approved of and sanctioned.

In Madura, the proposed working plans for Álagarmalai and Gundanshola have not yet passed the experimental stage, and have not therefore been submitted by the District Forest-officer for approval.

In Tinnevelly, much data have been collected from all the coupes in the district, which will be most valuable for determining the yield, local demand, and rate of growth when working plans are framed.

In South Malabar, the working plan of the Wálayár reserve was, after revision, sanctioned by the Conservator, and the working during the year carried out in accordance with the sanctioned plan with the results as shown in Appendix A.

In the Nilambúr plantations (South Malabar) the provisions of the preliminary working scheme for *thinnings* drawn up in 1885 were applied up to the end of 1889-90 with necessary modifications and with the best results, as has already been reported in the Conservator's last inspection note. The thinnings during the year under report were regulated in accordance with a fresh preliminary working scheme for another 5 years since prepared. The result of the year's working is shown in Appendix B.

CHAPTER IV.

Protection and Improvement.

(a) *Establishment, Ranges and Beats.*

14. *Establishment.*—The establishment for the circle consisted of—

—	For the year 1889-90.	For the year 1890-91.	Difference.
Permanent.			
Conservators	1	1	..
Deputy Conservators	8	8	..
Assistant do.	5	7	+ 2
Sub-Assistant do.	7	8	+ 1
Forest Rangers	33	33	..
Foresters	77	77	..
Forest Guards	396	396	..
Clerks	88	88	..
Peons	108	108	..
Temporary.			
Supervisors	61	64	+ 3
Surveyors	2	5	+ 2
Draughtsmen	1		
Depôt-keepers	10	8	— 2
Watchers	852	863	+ 11
Tannahdars	289	289	..
Lascars	7	3	— 4
Gardeners	78	56	— 22
Clerks	9	8	— 1
Peons	18	18	..
Total ..	2,050	2,040	— 10

The revised proposals on account of permanent subordinate establishments referred to in the last annual report were submitted during the year. The Conservator has since had several interviews with Board and Government on the subject, and the sanction of the latter for the new scale is shortly expected. The division of districts into range charges, beats, &c., will be regulated in accordance therewith. At this stage it appears unnecessary to refer under this section of the report to the trifling variations during the year in the number of range charges, &c., from what existed previously.

(b) *General Protection and Breaches of Forest Laws.*

15. General protection has not been adequate as may be inferred from the following figures and notes relating to the breaches of the forest laws in the several districts of the circle.

Preventive measures to the extent desirable have not been possible with the limited establishment at our disposal, but more rigorous exaction of duties from all grades has been as far as possible insisted on :—

District or Division.	Brought forward from the previous year.	Added during the year.	Cases disposed of during the year.								Balance remaining undisposed.
	Number of cases.	Number of cases.	Number of cases disposed of.	Number of persons concerned.	Percentage of cases withdrawn to the total number disposed of.	Percentage of cases compounded to the total number disposed of.	Amount of compensation realized.	Percentage of cases disposed of by the magistracy to the total number disposed of.	Percentage of cases in which convictions were secured to the total number disposed of by the magistracy.	Percentage of cases acquitted to the total number disposed of by the magistracy.	Number of cases.
1	2	3	4	5	6	7	8	9	10	11	12
							Rs.				
Chingleput ..	..	156	155	323	..	10	50	90	72	28	1
North Arcot ..	7	334	329	721	..	64	2,353	36	64	36	12
South Arcot ..	105	723	468	1,224	4	74	2,740	22	84	16	360
Salem	29	747	744	2,752	7	18	644	76	81	19	32
Trichinopoly ..	78	747	771	1,495	..	57	1,295	43	81	19	54
Tanjore	4	26	18	155	..	50	13	50	100	..	12
North Coimbatore.	7	132	99	283	12	73	1,088	15	47	53	40
South Coimbatore.	12	349	302	1,092	5	70	1,963	25	95	5	59
Madura	..	18	16	61	..	13	31	88	64	36	2
Tinnevelly ..	5	124	120	365	7	4	109	89	78	22	9
North Malabar ..	..	22	22	41	..	73	203	27	83	17	..
South Malabar ..	2	32	34	65	..	3	25	97	73	27	..
South Canara ..	69	262	270	393	..	20	160	80	87	13	61
Total for 1890-91.	318	3,672	3,348	8,970	3	45	10,674	52	80	20	642
Do. 1889-90.	207	2,679	2,568	6,461	4	46	8,662	50	70	30	318
Difference for the year under report	+ 111	+ 993	+780	+2,509	— 1	— 1	+2,012	+ 2	+ 10	— 10	+ 324

There were 318 cases pending disposal at the beginning of the year. The number of new cases during the year amounted to 3,672. Of the total, viz., 3,990 cases, 3,348 were disposed of within the year, leaving a balance of 642 cases undisposed of at the close of the year. The number of new cases shows an increase of 37 per cent. over that of the preceding year. The increase is chiefly in offences of unauthorised felling of wood and grazing without permission, principally in the districts of Chingleput, North Arcot, South Arcot, Salem, Trichinopoly and Coimbatore. Of the cases disposed of during the year, 52 per cent. were by Magistrates, 45 per cent. by "compounding," and 3 per cent. by "withdrawals" against a percentage of 50, 46 and 4, respectively, in the preceding year. Conviction was secured in 80 per cent. of the cases prosecuted before Magistrates as against 70 per cent. in the preceding year, which goes to prove that the zeal of the forest subordinates has not been altogether misspent. The

compensation realized on account of offences compounded shows an average of Rs. 7–0–11 per case and Rs. 2–14–5 per person accused as against Rs. 7–4–9 and Rs. 3–2–5, respectively, in the preceding year.

In Chingleput there were no prosecutions for unauthorized grazing in the forests, but in all such cases cattle were impounded. Great difficulty was, however, experienced in taking such cattle to the pounds, which are in most cases miles distant from our forests. The owners attempt to rescue the cattle either by force or otherwise while on their way to the pound. In one case, which occurred in the Chingleput range, a Forest guard was actually assaulted. The offenders were, however, convicted and fined Rs. 35 for unlawfully rescuing cattle, of which Rs. 10 was awarded as compensation to the Forest guard.

In North Arcot, the total number of cases for the year exceeded that for the preceding year by 79, which is an increase of 30 per cent. The Collector attributes this to the ubiquitous activity of the Acting District Forest-officer Mr. Marshall and remarks that much as he deplores the increase of prosecutions, he cannot say that any of them was uncalled for. In a case of goat grazing detected by the Acting District Forest-officer himself, the Tahsildar-Magistrate of Wandiwash inflicted a fine of only Rs. 3 for 150 head of goats. Two very important cases were detected in Pólúr, in one of which 6 men were convicted by the Sessions Judge and being old offenders were sentenced to rigorous imprisonment for periods varying from 3 months to 4 years. A wealthy merchant of the Labbai caste was also convicted for bringing out 2 cart-loads of Namai (*Anogeissus*) posts and fined Rs. 150. The conviction was upheld on appeal. In another case of illicit burning of charcoal, accused was fined Rs. 60. All these occurred in the Pólúr taluk and the punishments awarded have had a most beneficial effect.

In South Arcot the increase in the number of offences chiefly falls under grazing. The forests in the district were actually overrun by foreign herds of cattle and payment of grazing fees evaded as far as possible.

In Salem the greater number of cases were filed in the Tahsildar-Magistrate's Court of Atúr. This is reported to be due to illicit fellings carried on with the connivance of jaghir contractors.

In Trichinopoly the increase in the number of offences was chiefly under grazing as in South Arcot. In the matter of conviction for other offences, 2 cases are noteworthy as regards the adequacy of the punishment awarded, viz., one of unauthorised felling of 8 cart-loads of first-class timber by a village munsif, in which a fine of Rs. 150 was inflicted, and the other, of illicit clearing of an acre of kasan (*Memecylon*), by a ryot, who was convicted and fined Rs. 75. The 3 cases of "injury to forests by fire" are those in which Kasan jungle had been cleared and converted into charcoal.

In Tanjore one case deserves notice in which 5 persons out of 7 were convicted for shooting without license in the Kodiyakadu forests. The accused were heavily punished and a reward of Rs. 25 was given to 2 watchers and 1 private individual who exerted themselves in detecting the offence.

In South Coimbatore the large increase in the number of forest offences detected during the year is attributed to the fact that Forest Rangers Messrs. Mariapragasam Pillai and Ryan, who have replaced Foresters Sakaram Row and Sheffie Sahib in charge of Polláchi No. II and Mettupálaiyam No. VI ranges, respectively, worked hard and conscientiously, with the result that the number of cases reported has risen from 5 and 12 during the 2 foresters' time, to 73 and 133 respectively. The foresters referred to were both inefficient and notoriously lazy, always shirking out-door work. This fact proves how the protection of forests can be rendered more effectual by placing responsible and trustworthy men in charge of forest ranges.

(c) *Forest Fires and Fire Protection.*

16. The actual expenditure adjusted during the year under fire-protection amounted to Rs. 22,221 against Rs. 20,194 in the preceding year.

Forest fires cannot be properly recorded until the system of fire-record maps is introduced in all districts, but such maps cannot well be prepared until general maps of forest reserves are made available. Meanwhile, the rough estimates of forest fires in untraced areas are continued.

The following is an abstract of results:—

ABSTRACT I.—Fire-protection in square miles.

—	Up to 1889-90.		During 1889-90.			During 1890-91.			Total cost per square mile.
	Forest reserves attempted.	Total cost per square mile.	Attempted.	Percentage which escaped.	Average cost per square mile.	Attempted.	Percentage which escaped.	Average cost per square mile.	
1	2	3	4	5	6	7	8	9	10
		Rs.							
Fire traced	1,502	67	1,910	99	10	2,045	99	11	70
Untraced	6,596	..	6,524	70	..	6,657	70	..	..
Total ..	8,098	..	8,434	..	..	8,702	..	..	..

One hundred and thirty-five square miles have been added (as per margin) during the year to the fire-traced area as against 408 square miles in the preceding year. Increased areas have not been brought under protection in Salem, North Coimbatore, &c., as was expected, owing to change of District Forest-officers, the time of the new or acting officers having been fully occupied otherwise.

2 blocks	15 sq. miles	in North Arcot.
3 ,,	38 ,,	in Trichinopoly.
3 ,, (extension)	13 ,,	in South Coimbatore.
2 ,,	16 ,,	in Tinnevelly.
1 ,, (extension) New Amaram-palam forest	53 ,,	in South Malabar.
Total 11 blocks.	135 square miles.	

The average cost per square mile of area under special protection amounted to Rs. 11 as against Rs. 10 in the preceding year. The increase is chiefly due to the unusual length of the dry season, especially in the districts of Salem, Coimbatore, Madura and Tinnevelly, where the average cost of the preceding year was largely exceeded. The rates vary considerably as in previous years. The average cost per square mile in South Canara continues high owing, as explained by the District Forest-officer, to the areas protected being small and of irregular shape. A satisfactory diminution of cost has, however, been effected in the Coondapoor range.

The percentage of success in the protected tracts was the same as that of the preceding year, viz., 99 per cent.

The percentage of areas burnt was about 5 in South Malabar, 2 in South Arcot, Madura, Tinnevelly and North Malabar, and 1 in Chingleput and North Arcot. Protection in the remaining districts may be regarded as completely successful.

In Chingleput there was one fire in the Nagalapuram and one in the Kambakam reserved forests. The area burnt in each case was about 100 acres. In Nagalapuram the fire was probably due to incendiarism; no great damage was caused. At Kambakam the fire extended into the reserve from the fire lines through the carelessness of a forest guard who was at once suspended from duty. The area burnt contained a fair number of seedlings of thumba and red sanders.

In North Arcot, 2,374 acres were burnt in 10 blocks, but the Conservator still questions the accuracy of the returns from this district.

In South Arcot, 7 fires occurred in 3 blocks, and burnt about 2,700 acres, doing no great damage.

In Salem, arrangements have been made to clear the trees and bushes between railway fences and forest reserve boundaries for the better protection of the fuel reserves adjoining the railway.

In Madura, 10 fires occurred in 7 blocks and 4,290 acres were burnt varying from 30 to 1,920 acres; 3 of the fires were supposed to have been caused by the Periyár works' coolies; 2 spread from Travancore and from the Upper Palni plateau, respectively; one (a disastrous fire) was apparently caused by negligence in fire-tracing; and the remaining fires are attributed to incendiarism.

In Tinnevelly, 2,700 acres were burnt in 4 blocks. The District Forest-officer attributes them to the exceptional drought experienced during the year, the monsoons failing almost entirely.

In North Malabar, the Begur and Kurchiyat reserved forests were successfully protected with the exception of 680 acres in the latter, which was set on fire by the Kurumbas trapping for bison. They were prosecuted and sentenced to a month's rigorous imprisonment.

In South Malabar, an extensive fire occurred in the new Amarampalam forest, which was partially brought under fire protection. The area burnt is estimated at 4,000 acres. All the undergrowth, dead trees and old logs which were lying in the forest before it came into our possession, were burnt. The fire originated from within the fire lines and was apparently due to incendiarism. The Forester (Isaac Mathews) in charge of the range, who was found to be wanting in zeal and tact in managing his subordinates (some of whom are hillmen), was at once replaced by another officer.

The Collector of Malabar remarks:—

"The fact that only one fire—and that the work of an incendiary—occurred during this season, which has been the driest known for many years, proves the efficiency of the measures taken by the District Forest-officer."

(d) *Grazing.*

17. The policy of Government in regard to grazing was modified by Government Order, dated 29th October 1890, No. 844, Revenue, communicated by the Board in January 1891. The policy previously laid down was therefore practically followed during the year under report in regard to rates of grazing fees, &c.

The year's results may be gleaned from the figures in the following table:—

ABSTRACT J.—Grazing and Grass Collections.

Items.	During 1889–90.			During 1890–91.		
	Number of cattle.	Amount of revenue.	Average rate per head of cattle.	Number of cattle.	Amount of revenue.	Average rate per head of cattle.
1	2	3	4	5	6	7
			RS. A. P.			RS. A. P.
By grazing per head	484,541	60,720	0 2 0	569,786	62,825	0 1 10
By grazing contracts and sale of grass	..	3,655	..	..	5,920	..
Total ..	..	64,375	..	..	68,745	..

The reduction in the average rate, which is small, is probably due to a better enumeration of cattle grazed during the year. Compared with the preceding year, the total revenue for the circle shows an increase of Rs. 4,370 only. North Coimbatore as usual collected the largest amount in the circle—Rs. 20,694 against 23,091 in the preceding year. The decrease is attributed by the District Forest-officer to reduction in the number of foreign cattle which came up for grazing during the year, and to the fact that cattle disease prevailed largely in the Kollegál and Satyamangalam forests. Free grazing was also continued in this division as usual, and practically the whole of the reserved areas were thrown open for grazing. Salem comes next with a revenue of Rs. 14,096, which is an increase of only Rs. 2,080 over that of the preceding years, the rates levied in the district being abnormally low.

North Arcot stands third with Rs. 7,885 as against Rs. 4,466 collected in the preceding year. The increase is due simply to better supervision. Nevertheless the Acting District Forest-officer thinks that a large number of cattle grazed without permits especially in Pólúr and Palmanér.

South Coimbatore stands fourth with Rs. 6,435 as against Rs. 10,341 in the preceding year. The decrease is nominal, as owing to a change in the period for which permits were issued, a portion of the revenue which belonged really to 1890–91 was collected and credited to 1889-90. Rs. 1,648 was also realized in this division by sale of grass, &c. In South Arcot the revenue rose from Rs. 2,683 in 1889-90 to Rs. 4,829 during 1890–91. The increase accrued principally from fees levied on a considerably larger number of foreign cattle which grazed during the year in the Tiruvannámalai range forests.

North Malabar, Tinnevelly, Madura, Chingleput and Trichinopoly collected sums ranging from between Rs. 400 to Rs. 2,500. In Trichinopoly the right of grazing and cutting grass in the Cauvery and Coleroon padugais and plantations was leased out for Rs. 4,005.

There have been no irksome restrictions anywhere as to grazing, and areas where grazing has been absolutely prevented have been few and comparatively small. No fees whatever have been levied for grazing in unreserved lands, and the free removal of grass has been permitted and encouraged wherever possible. The Conservator's views on the new policy of Government in regard to grazing are already before the Board in his letter No. 2770, dated 7th February last, printed with Board's Proceedings of the 23rd idem, No. 76, and his later communication dated 15th June last, No. 731.

Information called for by Government in its Order, dated 7th May 1890, No. 314, is still due from certain districts. A consolidated statement for the circle will, however, be prepared and submitted as soon as possible if it is still required. In regard to the hay-making experiment in North Arcot, the Collector (Mr. LeFanu) remarks: "It is useless to cut fodder when the heavy spear grass has seeded. What we ought to do is to carefully burn small areas so as to start fair and then make our hay when the grass is half-grown." It was useless to try and do anything last year owing to the failure of monsoon and Mr. Marshall's heavy work in other directions. Thorough protection must precede any improvement in the fodder-supply, and the policy of "throwing open reserves" to an unlimited number of cattle on the occurrence of any scarcity in pasturage should, in the Conservator's opinion, give place to a system of cutting the grass and even leaves under supervision, which would afford relief both to men and cattle whilst improving instead of ruining the forests and grazing grounds especially on steep hill slopes.

(e) *Natural Reproduction.*

18. The following notes have been abstracted from the district reports:—

In Chingleput, reproduction from seeds has not been very successful. All the seedlings wither away in the succeeding hot weather in the plains. The reproduction from seed of bamboo in the Nagalapuram valley is promising. In the Saidápet range reproduction even in the protected areas is not satisfactory. Protection has doubtless resulted in a regrowth of some kind, but valuable species are very scarce. Grass is abundant with seedlings of less valuable trees. The absence of mature and seed-bearing trees in the protected areas doubtless accounts for this. The growth of scrub is very promising in these areas, which in the opinion of the Conservator indicates that, with due attention to cultural operations, they may be reclothed ere long with more valuable species.

In North Arcot, natural reproduction is very poor in almost all the taluks owing to fires and extensive grazings, especially in the dry *Acacia amara* forests of Gudiyátam, Chandragiri, Vellore and Palmanér. On the Javadis also, reproduction has been very poor except in the Carnaticghur reserve, where no grazing has been allowed, and in some of the out-of-the-way valleys below Patrakad, where it has been fair, consisting principally of *Anogeisus*, *Terminalia tomentosa* and inferior species. Reproduction of sandalwood is very poor when it ought to be the reverse. This is not to be wondered at when, as a matter of fact, thousands of goats have been allowed to roam all over the forests. Two areas have been enclosed by rough bamboo fences and the work will be continued. Probably the Bamboo (*B. arundinacea*) clumps require to be cut over to let in more light in many places. *Dendrocalamus strictus* is seeding on a small scale throughout the lower slopes and on a large scale in Chamala, which latter area has been rigidly closed against grazing. In the Napier and Mamandur reserves, reproduction of Red Sanders (*Pterocarpus santalinus*) continues to be fair; that of Satinwood (*Chloroxylon swietenia*) is excellent but patchy. Regrowth from stools is poor in compartments 1 and 2 of the Napier reserve, swept over by a fire in 1889 soon after it was cut over, but in Mamandur it is very fair, chiefly from soft-wooded species under which a considerable number of *Hardwickia* and *Anogeisus* seedlings are asserting themselves. In Chamala and Tirupati hill reproduction is fair, but chiefly it is feared from stools of repeatedly burnt-down seedlings. Prospects in Peddur and Musalimadugu reserves in the Palmanér taluk are encouraging. In unreserved lands reproduction is of course absolutely *nil*.

In South Arcot seedlings of Vengai (*Pterocarpus marsupium*), Namai (*Anogeisus latifolia*), teak and sandalwood abound on the slopes and plateaus of hill forests chiefly in Anaimalai, Tenmalai and Samimalai reserves in the Tiruvannámalai range, and the seedlings and saplings of Acha (*Hardwickia binata*) are thriving well. The reproduction of Thurinji (*Albizzia amara*) and Babul (*Acacia Arabica*) has been fair in some parts of Tindivanam. In the Kallakurchi range seedlings of Satin (*Chloroxylon swietenia*), Babul (*Acacia Arabica*), Velvelam (*Acacia leucophlœa*) and Karungali (*Acacia catechu*) are plentiful, but the reproduction on the whole is not satisfactory owing to overgrazing. In the Tirukoilúr range reproduction from seed is a failure.

Reproduction by coppice is a failure on the Tindivanam range and not very satisfactory in the Villupuram range. This is attributed to the very unfavorable season experienced.

Coppice from casuarina stools in the Cuddalore range is also unsatisfactory, 85 per cent. having failed. The Conservator has repeatedly urged that casuarina coppice cannot be depended on and will never pay. Coppice from Kasan (*Memecylon tinctoria*) and Thurinji (*Albizzia amara*) in the Vriddháchalam range is fairly rapid and successful. This is to be attributed to the soil being sandy and affording little or no pasture, and to the leaves of the prevailing growth (kasan) not being resorted to by cattle.

In Salem, the advance growth from seeds in specially-protected areas is promising, but in the open areas it is backward owing to overgrazing. In other forests where the forest is thick with bamboos and thorns, sandalwood seeds have germinated profusely and the seedlings have escaped being grazed down owing to the impenetrable nature of the growth.

In Trichinopoly, reproduction is reported to be profuse from seeds of the Bamboos, *Wrightia tinctoria*, *Santalum album*, *Pterocarpus marsupium*, *Chloroxylon swietenia*, *Feronia elephantum*, *Terminalia arjuna*, *Tectona grandis* and *Hardwickia binata*, on the Pachamalais, and from *Acacia Arabica* and *Leucophlœa* on the tank-bed reserves in the plains.

In Tanjore, reproduction from seeds of Palai (*Mimusops Indica*), Vembu (*Melia Indica*), Nagai (*Eugenia jambolana*), Pungam (*Pongamia glabra*), Vagai (*Albizzia Lebbeck*), Karungali (*Acacia sundra*) and Velvelam (*Acacia leucophlœa*), as well as the coppice growth of Kasan and Avaram (*Cassia auriculata*) in most of the reserves is reported satisfactory. In North Coimbatore, reproduction is excellent in the evergreen and semi-evergreen forests on the slopes of the Billigirirangas (Doddasampagai), but very poor in the deciduous forests above ghâts. Similarly the reproduction of fuel-producing trees below ghâts is very poor. The growth of sandalwood in the specially-protected sandalwood reserves and of Karuvelam (*Acacia Arabica*), Velvelam (*Acacia leucophœa*) and Margosa (*Melia Indica*) on the specially-protected fuel and fodder reserves is encouraging.

In South Coimbatore, reproduction from coppice in the Sholakarai block is all that can be desired, and in the coupes felled over, seedling reproduction of teak, rosewood, and vengai is most satisfactery.

The germination of seeds is apparently due to the small amount of undergrowth and to the loosened condition of the soil. In the mixed high forests there is practically no reproduction of the superior classes of trees owing to rank undergrowth and unsuitable state of the soil. Mr. Porter attributes the absence of teak seedlings solely to this and not to the causes (necessity for a sort of natural rotation) suggested in paragraph 14 of the Board's Review on the last annual report. Careful experiments with regard to reproduction are being prosecuted on the Anaimalais, but last season was unfavorable for them.

In Madura, natural reproduction is slow and backward on the Alagar hill slopes facing Madura, Waguthumalai, Murugamalai, on parts of the Palni hill slopes, Perumalmalai, Poombarai Vilpatti valley and the Sirumalai slopes, notwithstanding fairly good protection. The unsatisfactory results are considered to be due to the ground being stony and covered with a heavy growth of rank grass and thorny shrubs. In some places, *e.g.*, the western portion of Pambar, a large part of Alagar hill and parts of Vannathiparai, the improvement is marked. The coppice growth at Kadavur in Alagar hill is very good and even in the most recently felled and exposed parts of Vemburuli it is fair. The Gallnut (*Terminalia chebula*) has never been observed to reproduce itself from *seed*. The high rank grass probably prevents seedlings coming up.

In Tinnevelly, the District Forest-officer under head "Evergreen forests" records that in some places where clean cuttings have been made in primeval forest by the Kanis (hillmen), a most abundant crop of Kongoo (*Hopea Wightiana*) seedlings has sprung up. Kongoo is the most valuable timber in the district in much favour amongst natives. The District Forest-officer therefore considers the rapidity of its reproduction on a cleared area quite a noteworthy feature from a financial point of view.

In the deciduous forests in this district under special fire-protection, the reproduction in the coupes under the coppice with standard system is all that can be desired.

Reproduction from seed in the coppice coupes is not very successful as the teak seedlings generally succumb to the heat.

In North Malabar, reproduction from seed continues unsatisfactory, especially of teak, which is in fact *nil*. There is a scanty natural reproduction of vengai, blackwood and matti. It is believed that the hardness of the ground and the mass of rootlets which doubtless bind the soil prevent reproduction. The soil around 20 teak trees in different localities was turned over in view to ascertaining whether the loosening of the soil and the removal of the undergrowth would in any way improve matters. The results could not of course be ascertained till after the monsoon.

In South Malabar, the reproduction from seed especially of Benteak (*Lagerstræmia microcarpa*) and Blackwood (*Dalbergia latifolia*) in the Nellikutta and Karompoya reserved forests (rigidly protected from fire and cattle since 1883) is conspicuous, and coppice growth is also visible to a fair extent. Here also the remarkable absence of teak seedlings is attributed to the fact that the ground is too hard to receive the seeds which are believed to be eventually washed away by the heavy rains. There are, however, a few stool shoots. In the Chenatnair reserved forest in Pálghat treated as high forest, the reproduction is all from seeds, and the rigid exclusion of fire and cattle during the past six years has resulted in the springing up of tree growth on all sides, Irul (Kylia seedlings) being most predominant with Vengai (*Pterocarpus marsupium*) and Rosewood (*Dalbergia latifolia*) on the rocky ridges and elevated lands. In the two blocks which form the Walayar reserve, viz., Pulamparai and Varlapadi, natural reproduction is all that could be desired, particularly from coppice in all the sub-compartments felled since 1884-85. Teak (*Tectona grandis*) is the predominant growth, and the number of shoots on each stump averages from 2 to 6. Although there is no difference in soil or treatment in both places, the growth of teak and other species is better in Pulamparai than in Varlapadi, owing to the former receiving more of the south-west monsoon.

In South Canara, the species that have hitherto been noticed as exceptionally good producers (without reference to particular circumstances) are enumerated by Mr. Peake as follows by way of nucleus to be added to in future years :—

By seed—
1. Vateria Malabarica.
2. Hopea parviflora.
3. Terminalia tomentosa.
4. Macaranga tomentosa.
5. Acacia catechu.
6. Dillenia pentagyna.
7. Corypha umbraculifera.
8. Caryota urens.

By coppice—
1. Butea frondosa.
2. Tectona grandis.
3. Cinnamomum zeylanicum.
4. Carallia integerrima.
5. Terminalias.
6. Lagerstrœmia parviflora.
7. Acacia catechu.
8. Phyllanthus emblica.

By suckers—
Albizzia is the only genus inclined to reproduce itself in this way that Mr. Peake has noticed.

The whole question of natural reproduction, especially of the more valuable species, demands the most careful attention and experiments in sylvicultural operations at the hands of the District Forest-officer and Range officers.

It is not too much to assert that the more valuable timbers, *e.g.*, teak, rosewood and vengai, were being exterminated in all accessible forest areas in the southern districts, first, from want of any protection, and later on by heavy fellings of all mature trees without any proper system or care for reproduction and insufficient protection.

We have now secured fairly good protection though the establishments are inadequate, but have still to introduce and carry out proper remedial measures to restock the forests.

This is emphatically the business of professional Forest-officers, and the Conservator only wishes they had more time to devote to it.

(f) *Artificial Reproduction, Regular Plantations, Cultural Operations and Topes.*

19. The results under this head are summarized in the following abstract and district notes. The increased outlay on regular plantations is owing to large areas replanted during the year, notably in North Arcot and South Arcot, and wire-fencing put around the Gundan shola plantation in Madura. The replanted areas are not shown under "Area added during the year" in our returns. The total expenditure on topes appears also larger owing to the fact of an outlay exceeding Rs. 2,000 for wire-fencing around the Kodaikánal shola in Madura having been debited to this head.

ABSTRACT K.—Plantations, topes and cultural operations in other areas from commencement.

	Up to 1889-90.		Added during				Total.	
			1889-90.		1890-91.			
	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.
		Rs.		Rs.		Rs.		Rs.
Plantations	11,792	6,35,360	252	25,613	126	29,108	12,170	6,90,081
Topes	18,898	3,00,156	— 10	4,741	3	7,586	18,891	3,12,483
Other areas	3,846 and 100 miles of channel banks.	36,732	357	2,302	175	2,148	4,378 and 100 miles of channel banks.	41,182
Total ..	34,536 and 100 miles of channel banks.	9,72,248	599	32,656	304	38,842	35,439 and 100 miles of channel banks.	10,43,746

In Chingleput, 11,061 casuarina seedlings were transplanted from nursery beds in the Meyúr plantation. Owing to the unusual dry season, there were about 14,000 casualties in the previous years' plantings; they were duly replaced.

Several small cultural operations were carried out experimentally during the year. The revenue from topes was Rs. 267 against Rs. 254 in the preceding year.

In North Arcot, the following areas of casuarina plantations were replanted:—

	Number of blocks or compartment.	Area in acres.
Virinjipuram	3	49·15
Tiruvellam	7	41·90
Kilminnel	1	26·10
Do.	2	37·07
Total ...	...	154·22

In addition to the above, replanting was done in blanks in Amundi and Sainur plantations. The total number of plants put out was 141,470.

Large quantities of seeds of various kinds were collected by guards and watchmen and sown either in patches or broad-cast in certain reserves and topes. The broad-cast sowings have not been successful, but those sown in patches produced a certain number of seedlings, which, however, did not thrive well owing to the exceptionally hot and dry season. Eucalyptus garden (6 acres) started near Palmanér during the year has been added to form No. 61.

Range-officers are unable to account for a large number of the topes supposed to be under their charge. The earnest attention of the Collector and District Forest-officer has been invited to the matter during the Conservator's last inspection, and it is hoped that all possible endeavour will be made to trace the missing topes. The Conservator fears that many of them may have been alienated under the dharkast

rules of the Revenue Department or otherwise, without reference to the Forest branch. These remarks apply to other districts also.

In South Arcot, 40 acres of felled areas in 3 blocks were restocked with 49,000 casuarina plants at a cost of Rs. 848. The operation was carefully conducted and properly supervised, and the plants are reported to be in a fairly flourishing condition.

Owing to the very unfavourable season, numerous casualties occurred, which were, however, soon replaced.

Cultural operations also received attention. In the Villupuram range certain areas were ploughed and seeds of nim and babul were sown; seedlings successful. In the Kallakurchi range 21 measures of different kinds of seeds were sown in several acres, but results were unfavourable owing to the partial failure of the monsoon.

Some of the "topes" appear to be still under the charge of the Land Revenue Department, but the District Forest-officer is arranging for the management being really transferred.

In Salem, the produce of topes was leased out to better advantage, and the receipts during the year amounted to Rs. 2,105 against Rs. 796 in the preceding year.

In Trichinopoly, about 13 acres of a coupe of 74 acres in the Cauvery south bank plantations were replanted with casuarina and *Cassia siamea* seedlings which are reported to be doing well. Six acres of the Coleroon padugais in the Trichinopoly range were restocked with casuarina plants and 3 acres (gaps) in the Udayárpálaiyam range were filled in with Sissu and *Portia* cuttings and bamboo plants, which are reported to be doing well.

In Tanjore, about 36 acres in compartments Nos. 1 and 2 of the south casuarina plantation at Vettangudi were restocked with 34,963 casuarina seedlings, and 5,500 failures were replaced in the northern and southern casuarina plantations.

Under cultural operations 7 acres at Nadur and 3 acres at Ovilekudi were dibbled with cashew nuts; 70 per cent. germinated and the plants were reported to be in good condition at the close of the year. 300 Iluppai (*Bassia longifolia*) plants were put down in the Kannanthangudi keelayur reserve and 50 Pinnai (*Calophylum inophyllam*) seeds were dibbled in Mallottam west block reserved forest; 90 per cent. of the former and 94 of the latter proved successful and were looking healthy at the close of the year.

In North Coimbatore, certain small works of improvement were carried out during the year in Bylur sandalwood plantation.

In South Coimbatore (Tunacadavu, No. 1 range) the undergrowth was cleared over an area of about 30 acres and teak and vengai seedlings planted. Blanks were naked here and there under or near seed-bearing teak trees, to cover the seeds. The north-east monsoon having failed, most of the plants died and the seeds did not germinate. For the same reason much progress was not possible in regard to the 50-acre block referred to in paragraph 19 of the last annual report. The Range-officer was unable to get sufficient water for preparing the nurseries in time. The undergrowth was cut down and burnt and some one-year-old seedlings were planted, but the majority of them perished for want of rain.

In Madura, the growth in the Vannathiparai teak plantation has been seriously hampered by some very large shade giving trees standing among the young teak. They should be removed. In Velancombai teak plantation there are some really good specimens near the channel, considering the age of the trees and the locality. The growth of eucalypti and acacias in the Post office plantation (Kodaikánal) is very dense in parts. The Assistant Conservator of Forests (Mr. Thornton) thinned out over 50 tons under instructions from Mr. Gass and utilized the same for the construction of a charcoal kiln.

The Gundan shola plantation was extended during the year by a further area of 20 acres, and a good many casualties were replaced both in No. 1 and No. 2 plantings of 1888–89 and 1889–90. The season was a very unfavorable one in all respects. The plantings of 1888–89 and 1889–90 are coming on very well; out of those of 1890–91, three-fourths are very good, and the remainder very poor, and will have to be gone over again this year. There was much frost, but the plants having been well covered, did not suffer much. The plantation was fenced with wire-fencing received from England, a good deal of levelling, draining and revetment work done and the road

system rendered complete and passable throughout for carts. It will, however, be necessary to blast away certain projecting rocks.

The Navinipati garden (tope) at Melúr was sold in the Revenue Department under instructions from the Board of Revenue and realized only Rs. 360. The garden will be removed from the list of topes next year.

In Tinnevelly, special experiments were made by sowing Wodai (*Acacia planifrons*) with agricultural crops, such as Cholum (*Sorghum vulgare*), Bengal-gram (*Cicer-arietinum*) and Madras-gram (*Dolichosuniflorus*), but the results were not very encouraging owing to the failure of the north-east monsoon.

The experiment will be repeated this year. The wodai seedlings readily germinated after passing through the goats, but failed for want of shade. The District Forest-officer states that this combination of forestry with agriculture has lately been successfully employed in Tunis.

In North Malabar, the teak plantations at Kanot were weeded, pruned and fire-traced as usual. The growth of the trees is reported to be far from rapid. In the Government cardamom garden at Mukki and the Mukki Poya cardamom plantation, the crop during the year was fairly good, but the amount realized by sale was very small owing to the low price ruling.

In South Malabar, teak planting with mahogany standards sanctioned in 1885 was continued and the fifth block (100 acres) for which a site was cleared in the preceding year was duly planted with 105,298 teak and 843 *Swietenia Macrophylla* seedlings; 164 bamboo plants raised from seeds of *Cephalostaehyum* and *Bambusa Longispathus* were also planted in this block. The total cost of planting block No. V amounted to Rs. 3,495 against the sanctioned estimate of Rs. 3,600. There were only 6,070 casualties of teak, which were immediately replaced; 2,752 teak casualties in block No. IV were also made good. The growth of teak in blocks Nos. I to IV is good.

The *Swietenia Macrophylla* plants in block No. V keep pace with the teak and are vigorous. They are so far free from the borer which attacked the *Swietenia mahagoni* tried in previous years and now given up.

Of the 12 lb. of seeds of *Swietenia Macrophylla* received from the Superintendent, Royal Botanical Garden, Culcutta, in March last, 7 lb. were sent under instructions from the Conservator of Forests to nine District Forest-officers in the Southern and Northern Circles for experiment, and 1 lb. to the Ranger at Pálghat, Mr. Hadfield retaining only 4 lb. for Nilambúr. The seed germinated well and produced 2,500 seedlings which will be planted as standards in block No. VI, for which a site has already been prepared.

In South Canara, one acre of casuarnia 22 years old was cleared at Ullal. The yield including roots and branches amounted to 128 tons and 734 lb., the average annual acre increment being 5·8 tons. The mean of 4 years is now as nearly as possible 6 tons per acre per annum.

The demand for the wood was very slack during the year owing, apparently, to reduction in tile manufacture. The price obtained was only Rs. 3–5–0 per ton all round against Rs. 4–4–0 obtained in the preceding year.

(g) *Works of improvement.*

20. In Chingleput, the Pulrambakkam reserve was fenced with babul seedlings alongside of the trench made last year, but the result is not satisfactory.

In North Arcot, fencing of some sandalwood areas was done on the Javadis. All topes which have been identified and numbered by Range-officers have also been fenced, trees pruned and lopped and paths cleared; sign-boards were also erected. Prickly-pear was cleared in the Virinjipuram and Kilmunnel plantations and Chittoor reserve. An improvement cutting was begun early in 1890 in an area of 22 acres of the Chamala reserve which was divided into four blocks for the purpose.

In South Arcot, about 11 miles of old patrol lines were re-cleared and about 14 miles of new lines cut, besides some fencing (about one mile) done in the reserves and topes.

In Salem, sign boards were put up to indicate the reserves, topes, rest-houses, &c., in the district.

In Trichinopoly, clearing of undergrowth and prickly-pear, cutting of creepers, weeding and fencing were carried on in the Cauvery and Coleroon plantations and padugais as usual.

In North Coimbatore, 14,040 palmyra seeds were collected and sown along the fences of three of the fuel and fodder reserves in the Erode taluk.

In South Coimbatore, the whole of the coupes felled over up to the end of 1889 in the Sholakarai block amounting to 619 acres were cleaned by the watchers and all the teak, rosewood, vengai and venteak seedlings freed of creepers and any coppice growth which dominated them.

This will have to be done annually till the seedlings become sufficiently high to take care of themselves. Some fencing was done in Kelampaliyam reserve in No. 5 range at a cost of Rs. 67, and prickly-pear was eradicated in Avanasi tope at a cost of Rs. 153.

In Madura, on both sides of the new road at Alagar Hill, 219 mango, pinnai and margosa plants were planted.

In Tinnevelly, the only kind of improvement fellings was in the coupes worked under the coppice with standard system. Considering the poor quality of the soil and the nature of previous growth (trees crooked and stunted) under the permit system of working, the best method of improvement felling that could be adopted was to cut down the whole growth flush with the ground and give the stumps a chance of reproducing shoots without continual molestation, and the results are very encouraging.

In South Malabar, weeding, pruning, parasite clearing, thinning and other operations were carried on as usual.

(h) *Experiments and exotic trees.*

21. The report on experiments with exotics, &c., which continued to progress as satisfactorily as usual, will be found in appendix C.

(i) *Communications and buildings.*

22. A comparison of the figures in the following table shows that better progress was made during the year under this section of works, the total outlay exceeding that of the previous years, more particularly under new works, both roads and buildings :—

ABSTRACT L.—Communications and Buildings.

Description of work.	Cost during 1889-90.	Cost during 1890-91.
	RS.	RS.
Road and bridge repairs	6,186	6,263
New roads and bridges	11,653	15,127
Building repairs	5,740	4,783
New buildings	11,912	17,518
Repairs and other new works	446	234
Total ...	35,937	43,925

23. Works consisted of—

In Chingleput, the addition of bath rooms and outhouses to the existing rest-houses, the want of which was very much felt. The buildings are, however, too small and only fit for natives or as offices.

In North Arcot, the completion of a rest-house at Virinjipuram which had been hanging fire for 2 years, the construction of an inspection shed on the hills above the Napier reserve, the purchase of the Palmanér Apothecary's quarters, reconstruction of a rest-house in Carnatic ghur, and general repairs of several rest-houses, the Amerdi bridge and 2 roads. The tramway at Virinjipuram was also maintained.

In South Arcot, the continuation of work on the Tenmalai ghât road, where the present Sub-Assistant Conservator Mr. Wouterz has done a great deal of useful work in widening, blasting, erecting rivetments, &c.; the construction of an inspection shed at Kálpadi, the reconstruction of that at Shanikulam, repairs to rest-houses on Kavuthimalai and Melpet (Tenmalai) and additions to the latter, also the clearing of a well in the Tiruvannámalai range office compound.

In Salem, the repairs of forest buildings as usual.

In Trichinopoly, the repair of the ghât road from Sobapanapuram to the rest-house on the hills and the construction of a bridle path to the rest-house.

In Tanjore, re-roofing the forest rest-house at Tirumalaivasal.

In North Coimbatore, the repairs of Lockanally, Hassanur, Bylur and Burghur ghât roads and forest buildings and the construction of a rest-house at Gairmalla.

In South Coimbatore, the construction of a bungalow and office for the Range-office at Mount Stuart, lines for the peons and writer, a store shed for the tramway plant and tools, lines for the elephant establishment, and quarters for the Udamalpet Range-officer, and repairs to old buildings. Also the improvement of tramway line by decreasing the gradients and easing off curves, and in laying down 2 miles of new line from Pulitaniparai to Sangam, the construction of several new roads and repairs of other roads and bridges.

In Madura, the completion of the Alagar Hill road, which is 1 furlong under 8 miles in length and has an average gradient of 1 in 19, crossing a ridge of 927 feet above its level at the entrance to the reserve, opening a road about 4 miles long in Vannathiparai block of Cumbum valley reserve, a second in the Gundan shola and a third from Vembruli block to Nattam road, and repairs to other existing roads.

Also the construction of Range-officer's quarters and office buildings at Cumbum and Palamedu and Range-officer's and range-clerk's quarters at Kannavaipatti and Kodaikánal, respectively, and repairs to forest buildings.

In Tinnevelly, the tracing and cutting of a bridle path ($6\frac{1}{8}$ miles) from Shengalteri to Kanar, the conversion of Kottentari bridle path ($4\frac{1}{2}$ miles) into cart road: tracing and cutting of a road ($3\frac{5}{8}$ miles) from Otapuli to Kamugadi Moolai, the partial construction of the Forest-officer's bungalow at Mundauthorai and completion of rest-houses at Sivasylam and Courtallam and sinking a well in Vasudevanallur.

In North Malabar, the construction of 3 inspection paths, 3 new roads, 2 forest-guards' stations at Kaikaty and Karticolum and a store at Begur.

In South Malabar, the opening of about $1\frac{1}{4}$ miles of compartment road in the new teak plantation, nearly $1\frac{1}{2}$ miles of inspection paths and compartment roads in Walayar reserve and half a mile of bridle path to Kaner Kunnu (6 feet wide) in Chinat Nair reserve and the construction of a wooden bridge in the Amarampalam range and a rest-house and forester's quarters at Walayar.

In South Canara, the rebuilding of the hut in Sabladi.

A detailed list of completed forest buildings in the circle forms an appendix (D) to this report. A statement showing the financial results of working the tramways in North Arcot and South Coimbatore is also appended (appendix E).

CHAPTER V.

YIELD AND WORKING.

24. The total yield during the year as compared with that of the preceding year is shown in the following table:—

ABSTRACT M.—Comparative yield.

Heads.	TIMBER IN CUBIC FEET INCLUDING SANDALWOOD.		FUEL IN CUBIC FEET.		BAMBOOS IN NUMBER.		MINOR PRODUCE—GROSS VALUE IN RUPEES.	
	1889–90.	1890–91.	1889–90.	1890–91.	1889–90.	1890–91.	1889–90.	1890–91.
By Government agency ..	182,315	(*a*)153,815	867,532	(*b*)900,366	23,759	42,478	30,100	54,362
By purchasers including confiscations	1,663,868	1,484,128	7,039,783	5,854,223	5,470,344	6,066,459	* 281,108	* 342,815
Free grants	6,523	10,628	800	400	21,415	21,657	37	114
Total ..	1,852,706	1,648,571	7,908,115	6,754,989	5,515,518	6,130,594	311,245	397,291
Difference in 1890–91 as compared with 1889–90 ..	..	—204,135	..	—1,153,126	..	+615,076	..	+ 86,046
Percentage of increase or decrease on the previous year's totals	..	— 11	..	— 15	..	+ 11	..	+ 28

* Including grazing fees.

(*a*) Includes 106 cubic feet, being excess found on re-measurement of timber and sandalwood collected and taken to depôt in previous year.

(*b*) Includes 18 cubic feet, being excess found on re-measurement of fuel collected and taken to depôt in previous year.

NOTE.—The value of minor produce given above is that of the quantity *disposed of*, not that of the quantity *collected*, as the value of the latter is not known.

The difference between the yield of the two years is explained under the several heads. The average approximate yield during the year per square mile of forest area under immediate control amounted to 845 cubic feet of timber and fuel, 617 bamboos and 40 rupees' worth of minor produce as against 1,000 cubic feet, 500 and Rs. 32, respectively, in the preceding year.

Section 1.—*Departmental operations.*

25. The number of trees felled during the year (Form No. 68) as compared with the preceding year's is as follows :—

ABSTRACT N.—Trees felled and converted.

Balance on 31st March 1890.	Felled in 1889-90.	Felled in 1890-91.	Converted in 1889-90.	Converted in 1890-91.	Balance on 31st March 1891.
302	7,068	5,106	7,117	5,129	279

The increase in the number of trees felled during 1889-90 was due to special causes as explained in that year's report. The removal of timber during the year in the Tiruvannámalai range in South Arcot by purchasers under contract system accounts for the large decrease in that district under departmental operations.

26. The produce collected and disposed of by the department is shown in the following table :—

ABSTRACT O.—Produce collected and disposed of.

Produce collected.	DURING 1889-90.			DURING 1890-91.			
	Quantity.	Cost.	Average.	Stock on 1st April 1890.	Quantity.	Cost.	Average.
		RS.	RS. A. P.			RS.	RS. A. P.
Timber in cubic feet	179,613	38,538	0 3 5	189,485 †—3,243	(a) 152,433	40,486	0 4 3
Fuel in cubic feet	367,532	35,377	0 0 8	31,455 + 3,243	(b) 900,366	27,952	0 0 6
Bamboo in number	23,759	298	0 0 2	8,317	42,478	985	0 0 4
Sandalwood in cubic feet ..	2,702	2,208	0 13 0	1,992	(c) 1,382	1,082	0 12 6
Minor produce in maunds of 25 lbs.	20,372	19,424	0 15 3	10,194	(d) 16,197	28,760	1 12 4
Total ..	..	95,845	..	..	..	99,265	..

Produce disposed of.	DURING 1889-90.			DURING 1890-91.			
	Quantity.	Sales.	Average.	* Quantity.	Sales.	Average.	Stock on 31st March 1891.
		RS.	RS. A. P.		RS.	RS. A. P.	
Timber in cubic feet	153,726	94,622	0 9 10	187,776	1,20,964	0 10 4	150,899
Fuel in cubic feet	893,889	78,864	0 1 5	830,682	67,441	0 1 4	104,382
Bamboos in number	25,318	1,968	0 1 3	41,627	3,069	0 1 2	9,168
Sandalwood in cubic feet ..	2,283	14,115	6 2 11	2,706	19,040	7 0 7	668
Minor produce in maunds of 25 lbs.	12,625	30,100	2 6 2	22,857	54,362	2 6 1	3,534
Total ..	..	2,19,669	..	..	2,64,876	..	..

(a) Includes 9 found in excess in the depôt.
(b) Do. 18 do. do.
(c) Do. 97 do. do.
(d) Do. 31 do. do.
* Includes that used departmentally, written off, &c.
† Timber (saplings) treated as firewood.

The decrease in the quantity of timber collected occurred principally in North Arcot and South Coimbatore. In the former no redwood was felled nor collected for want of demand and other causes, and in the latter the felling of timber was restricted owing to the comparatively large stock on hand.

The decrease in South Arcot is accounted for in paragraph 25 *supra*. In Madura timber felling operations, small as they are, have been much hampered by imports from Coimbatore and Pálghat on one side and from Travancore on the other, the last being on a considerable scale. The increase in the quantity of fuel collected occurred chiefly in South Arcot, Madura and Tinnevelly. In the first-named district it was due to large supplies of mangrove wood to the South Indian Railway and greater demand in Chidambaram town; in the second to the departmental cutting of firewood coupes under certain proposed preliminary working schemes; and in the third to large amount of coupe fellings and the larger demand by Cotton Mills' Companies.

The increase under bamboos is due to large number collected departmentally in Madura and South Malabar, and the decrease under sandalwood to non-collection of it in North and South Arcot, pending enumeration of growing stock ordered by the Conservator. The decrease in the quantity of minor produce collected is due in great measure to the sudden failure of demand for wild nutmeg in South Canara, which cut off a considerable item, but other more valuable species collected, though smaller in quantity, cost more for collection and brought in a larger revenue.

With reference to disposals during the year, there was a considerable increase under timber and sandalwood owing to the disposal of previous year's stock, but under firewood a large stock of engine fuel in Trichinopoly for the South Indian Railway was not removed and paid for owing to the inability of the Company to furnish specials.

Under "Minor produce" results exceeded expectation both in South Coimbatore and South Canara. In the former it was due to the zeal and energy displayed by the Range officer in developing departmental collections; and in the latter to prices for myrabolams having risen satisfactorily. The demand for wild mace was also steady and cinnamon flowers yielded a very fair crop. The collection and disposal of the crops was more prompt and satisfactory than in former years.

There were no indents during the year from the Department of Public Works either for timber or firewood; 88,752 cubic feet of fuel were supplied to South Indian Railway, *i.e.*, 9,291 from North Arcot, 46,017 from South Arcot and 33,444 from Trichinopoly; North Arcot supplied fuel amounting to 150,940 cubic feet to the Villupuram-Guntakal State Railway, 64,626 cubic feet to the Colar and Nandidrug gold mines and 28,399 cubic feet to the Central Jail, Vellore; Trichinopoly 2,174 cubic feet of fuel to the Government jail, and Salem 1,801 cubic feet of timber and 1,420 bamboos to the Reserve Remount Depôt in Hosúr.

The value of stock balance in *sale depôts* was Rs. 56,480, as against Rs. 44,908 at the commencement of the year showing an increase of Rs. 11,572.

Section 2.—*Removals by purchasers.*

27. The following table shows the removals by consumers and purchasers during the year as compared with the preceding year.

PRODUCE removed by permit holders on seigniorage or otherwise (Appendix 72-A).

Produce.	DURING 1889-90.			DURING 1890-91.		
	Quantity.	Amount of sales.	Average.	Quantity.	Amount of sales.	Average.
		RS.	RS. A. P.		RS.	RS. A. P.
Timber in cubic feet ..	1,648,368	1,50,572	0 1 6	1,469,842	1,39,343	0 1 6
Firewood in cubic feet.	7,030,486	1,85,737	0 0 5	5,844,203	1,86,988	0 0 6
Bamboos in number ..	5,459,249	79,740	0 0 3	6,044,381	93,010	0 0 3
Grass and grazing ..	..	64,158	..	..	69,123	..
Minor produce ..	..	2,16,758	..	..	2,73,245	..
Total ..	..	6,96,965	..	..	7,61,709	..

The total revenue for the year under this head exceeded that for the preceding year by Rs. 64,000 or nearly 10 per cent. The principal increases accrued under *bamboos* and *minor produce*. Under *timber*, there was a decrease both in quantity and value, partly due to the gradual abolition of the permit system in some districts in favour of departmental cutting, and partly to the smaller number of trees sold from lands assigned on darkhasts, and to lower prices realized at auction sales of trees on poramboke lands and tank-beds.

Under *firewood* the decrease in quantity was chiefly in North Arcot and Madura. In the former, quantities were not available in all cases of removals by coupe contractors; in the latter, the demand for fuel was limited owing to there being large sources of private supply in the shape of Zemindari and Devastanam lands, all of which seem to have sprung into life again directly our seigniorage system was abolished in favour of departmental cutting of coupes. These private owners always appear able to undersell Government. The District Forest-officer, Mr. Gass, remarks however that as most of these private supplies are now so far away from the chief centre of demand—Madura town—the future is by no means so full of uncertainty as the past has been. The revenue shows a slight improvement owing to somewhat better rates obtained.

The increase under *bamboos* is the natural result of a better system of working introduced in North Arcot, &c.

The increase under *grazing* is fully explained in chapter IV of the report. That under *minor produce* is largely due to the transfer of considerable items of tree rents from Land Revenue—Miscellaneous to "Forests" in the districts of Chingleput, Salem and Trichinopoly. In North Arcot the large revenue under this head is due to the better system of sale introduced by the Acting District Forest-officer, Mr. Marshall, and better prices realized in consequence. The question of crediting tree rents in Salem referred to in last year's report has been under consideration with the Collector and is now before the Board for orders.

The increase in North Coimbatore is due to the inclusion of a sum of Rs. 5,444 realized and credited in the accounts during 1890-91 from the sale of avaram and vembadam barks and pungam seed contracts for 1891–92.

Appendix F to this report shows the number of coupes together with the outturn of the same felled on the coppice with standard system during the year in Tinnevelly. It will be seen from it that the net profit per acre varies from Rs. 7 in Nángunéri to Rs. 30 in Tenkási. As the growth is in most places scrub jungle the District Forest-officer considers that Rs. 30 is a good price to attain.

Confiscated produce.

28. The confiscated produce sold during the year as compared with the year before shows the following results :—

ABSTRACT. P.—Confiscations.

Produce.	During 1889–90.			During 1890–91.		
	Quantity.	Amount.	Average.	Quantity.	Amount.	Average.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber .. .. C. ft. ..	15,500	1,572	0 1 7	14,286	2,949	0 3 4
Firewood .. .. ,, ..	9,297	636	0 1 1	10,020	650	0 1 0
Bamboos .. .. No. ..	11,095	275	0 0 4	22,078	376	0 0 3
Minor produce. Money value ..	..	192	..	..	447	..
Total ..	..	2,675	..	..	4,422	..

Section 3.—Free Grants of Forest Produce.

29. The following exhibits the free grants made by Forest-officers and their value :—

ABSTRACT Q.—Free grants.

District.	Timber.	Firewood.	Bamboos.	Minor produce.	Money value.
	C. ft.	C. ft.	No.	Rs.	Rs.
Chingleput	330	..	..	104	145
North Arcot	5,941	..	13,645	5	1,073
South Arcot	..	400	..	..	28
Salem	2,786	..	3,492	..	810
Trichinopoly	54	..	120	..	15
North Coimbatore	560	..	4,400	5	125
South Coimbatore	537	..	..	..	104
Madura	420	..	..	..	78
Total ..	10,628	400	21,657	114	2,378
Free grants of previous year ..	6,523	800	21,415	37	3,070

No account is kept of large quantities of produce taken free from unreserved lands or of free grazing.

CHAPTER VI.

Financial Results.

30. The revenue and expenditure of the Circle for the year as per Examiner's Form No. 64 compare with the actuals of the five previous years as follows :—

Items.	For 1885-86.	For 1886-87.	For 1887-88.	For 1888-89	For 1889-90.	For 1890-91.	Revised estimate for 1890-91.	The year under report compared with the previous years.	The year under report compared with the revised estimate.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Revenue ..	6,52,318	6,94,535	8,10,197	8,98,086	9,51,017	10,49,861	9,70,000	+ 98,844	+ 79,861
Expenditure A. Conservancy and works.	2,34,006	3,80,192	3,45,742	4,08,269	3,85,586	4,20,728	4,20,000	+ 35,142	+ 728
B. Establishments ..	3,00,608	3,40,529	3,28,981	3,33,863	3,21,442	3,41,002	3,50,000	+ 19,560	— 8,998
Total expenditure ..	5,34,614	7,20,721	6,74,723	7,42,132	7,07,028	7,61,729	7,70,000	+ 54,701	— 8,271
Net results ..	+1,17,704	— 26,186	+1,35,474	+1,55,954	+2,43,989	+2,88,132	+2,00,000	..	..

The revenue continues to increase and exceeds that for 1889–90 by nearly a lakh, the surplus being Rs. 44,143 more than that for the preceding year. The revenue was about 8 per cent. more and the expenditure only one per cent. less than the original revised estimates as approved by the Board and Government.

The increase accrued principally under budget heads "II*a*, Timber" and "II*e*, Minor produce." Nearly one-half of the increase under "II*a*" was in North Arcot, where better prices were obtained for trees on dharkast lands, &c. The revenue from this source in Trichinopoly was better than was anticipated. In Malabar, the actuals largely exceeded the estimates owing to the very brisk demand from Mysore for small deadwood in North Malabar, the more favorable outturn of teak poles and teak pieces from the sub-compartments felled in the Wallayar reserve and the disposal of dead trees in the Nellikutta reserved forest in South Malabar to a contractor. The increase under II*e* has already been explained in paragraph 27 *supra*. There was also an increase under "II*b*," due chiefly to higher amounts obtained for firewood in the coppice coupes in Tinnevelly.

Towards the cash surplus shown, North Arcot contributed 47 per cent., Salem 33 per cent., and North Coimbatore 20 per cent. The revenue in North Arcot exceeded two lakhs, Salem one and a half lakhs and North Coimbatore and South Coimbatore one lakh in each.

31. The working results of the year may be better understood from the following :—

	RS.
Cash surplus of the year as shown above	2,88,132
Add expenditure on live-stock, stores, tools and plant, F. No. 73-B	25,662
Do. on settlement establishment, B charges	19,257
Do. on demarcation, VIII (*a*)..	20,242
Do. on acquisition of lands, VIII (*b*)...	5,782
Do. on surveys, VIII (*c*)	80,813
Do. on law charges, IX (*b*)	1,885
Add increase in outstanding revenue (form No. 66)	8,767
,, decrease do. on account of advances (form No. 65)	2,580
,, increase in the value of depôt stock	11,562
Total in favour of the ordinary working account is ... as compared with Rs. 3,51,379 in the preceding year.	4,64,682

The financial results of the year are therefore highly satisfactory and will continue to improve under more direct departmental control and by efficient establishments.

CHAPTER VII.

General Remarks.

32. *Forest school.*—One Ranger (Mr. Bower) and one Forester (Mr. Blacker) were deputed to the Forest school during the year.

33. *Conduct of the establishment.*—One Ranger, who remained under suspension at the close of the preceding year, was, after a thorough investigation of the charges against him, reduced to the Foresters' class. He has since done well and will, it is hoped, retrieve his former position. One Ranger was reduced to a lower grade, two Rangers were degraded to Forester, and they subsequently resigned. Nine Foresters were dismissed and three reduced to lower grades. As usual, there were numerous reductions and dismissals among the men of the Forest Guards' class. Four cases of fraud and misappropriation of Government money, chiefly by permit-issuing officers, came to light. The men concerned were prosecuted and conviction secured. One Forester and one Range clerk were prosecuted for theft of Government timber and misappropriation of Government money respectively; conviction was secured in both cases.

34. *Health of the establishment.*—The subordinate staff, especially in malarious tracts, suffered more or less as usual; a few Rangers and several Foresters were absent on leave on medical certificate for periods varying from 1 to 5 months. One Ranger three Foresters, five Forest Guards, several watchers and many coolies died. Fever was prevalent as usual in most districts, notably in Tinnevelly, Coimbatore, South Canara and Malabar, in parts of which small-pox and cholera also prevailed.

35. *Service books.*—Satisfactory progress was made during the year in the verification of service registers and the book of a very few men (mostly inferior servants) remained unfinished at the close of the year.

36. *Wild elephants.*—In South Coimbatore, three wild elephants were captured in pits, two of which died subsequently, but not, it is believed, from injuries received in capture.

In North Malabar, a young tusker was captured in the Begur reserved forest and is reported to be doing well.

In South Malabar, two elephants, one a young cow and another a tusker, were captured in the new Amarampalam forest.

37. *Administration.*—The Collector of Malabar (Mr. Dumergue), in forwarding the annual report of South Malabar, writes: "In conclusion, I would record my opinion that administration of the South Malabar forest district reflects great credit on the Forest-officer Mr. Hadfield."

No other Collector makes any general comment with regard to the administration, which, in the Conservator's opinion, has been good on the whole and creditable to District Forest-officers. There have been several changes in district offices during the year and the want of experienced officers of the controlling staff continues to be much felt. Mr. Marshall relieved Mr. Carroll as acting District Forest-officer, North Arcot, the latter officer going to Tanjore and subsequently to Salem on Mr. Cherry's appointment as Acting Conservator, second grade.

Mr. Morgan was transferred from North Coimbatore to Nílgiris and Mr. Sheffield took his place in North Coimbatore as a temporary measure.

APPENDIX A.

STATEMENT showing financial results, yield and number and value of trees reserved in different sub-compartments in South Malabar Division.

Sub-compartment.	Extent.	YIELD PER ACRE PER ANNUM.						
		Teak poles.	Teak pieces.	Jungle wood posts.	Pula wood.	Bamboos.	Bamboo thorns.	Billet fuel.
1	2	3	4	5	6	7	8	9
							TONS.	TONS.
I 3 (*e*)	* 25·52	·03	5·27	·07	..	18·20	·04	·94
I 4 (*e*)	28·65	1·82	..	·08	..	17·85	..	·78
I 4 (*f*)	29·46	..	4·78	..	..	22·10	·04	·73
II 9 (*c*)	26·34	·18	9·80	..	·01	12·50	..	1·48
II 9 (*d*)	26·34	·25	14·98	..	..	7·69	..	1·14
II 9 (*e*)	26·66	·15	7·38	..	..	13·46	..	1·31
II 9 (*f*)	27·71	·32	11·10	·07	..	11·29	..	1·30
II 9 (*g*)	27·55	·18	11·55	·10	..	24·07	..	1·28
II 9 (*h*)	24·23	·38	14·74	..	..	8·33	..	1·03
II 9 (*i*)	25·53	·10	11·69	..	..	10·40	..	·88
II 9 (*j*)	22·38	..	·90	..	..	15·90	..	·46
Total ..	290·37	3·41	92·19	·32	·01	161·79	·08	11·33

Sub-compartment.	YIELD PER ACRE PER ANNUM—*cont.*			Net profit per acre per annum.	Number of trees reserved.	Value of trees reserved.	Receipts during the year.
	Faggot fuel.	Twig fuel.	Total fuel.				
	10	11	12	13	14	15	16
	TONS	TONS.	TONS.	RS. A. P.		RS. A. P.	RS. A. P.
I 3 (*e*)	·34	·09	1·37	2 5 4	91	38 15 0	583 0 2
I 4 (*e*)	·48	·04	1·30	1 11 11	164	67 5 0	488 6 9
I 4 (*f*)	·33	·03	1·09	1 14 1	178	75 14 0	546 0 1
II 9 (*c*)	·79	..	2·27	3 8 6	307	134 7 0	918 12 0
II 9 (*d*)	·78	..	1·92	3 5 11	319	131 1 0	876 4 9
II 9 (*e*)	·60	..	1·91	2 14 2	240	98 2 0	750 0 0
II 9 (*f*)	·55	·01	1·86	3 5 9	310	126 9 0	907 9 0
II 9 (*g*)	·43	·01	1·72	3 5 8	420	162 3 0	905 1 3
II 9 (*h*)	·57	..	1·60	3 10 3	240	104 11 0	874 14 6
II 9 (*i*)	·30	..	1·18	2 9 0	260	102 13 0	641 9 2
II 9 (*j*)	·08	..	·54	0 12 2	64	22 15 0	167 13 0
Total ..	5·25	·18	16·76	29 6 9	2,593	1,064 15 0	7,659 6 8

*25·20 acres only worked.

APPENDIX B.

STATEMENT showing the result of thinnings in the Nilambúr plantation.

Name and number of block.	Number of compartment.	Area in acres.	Age at commencement of 5 years, period from 1890-91.	NUMBER OF TREES ACTUALLY STANDING AT END OF 1889-90.		Approximate number proposed to be thinned during the next 5 years as per P. W. S.	Number of trees actually thinned.	NUMBER OF TREES THAT WILL ACTUALLY REMAIN AT CLOSE OF 5 YEARS' PERIOD.		NUMBER OF TREES THAT OUGHT TO STAND AT THE END OF 5 YEARS' PERIOD, *i.e.*, 1895, AS PER P. W. S.		Remarks.
				Per acre.	Per compartment.			Per acre.	Per compartment.	Per acre.	Per compartment.	
I	2	3	4	5	6	7	8	9	10	11	12	13
I. Iravillikava	2	27·35	46	54	1,486	..	..	54	1,486	80	2,188	
II. Edakad	8	147·19	39	91	13,387	..	..	91	13,387	100	14,719	
	10	39·56	30	159	6,295	1,548	1,546	120	4,749	120	4,747	
V. Arivikad	2	84·34	42	93	7,868	278	281	90	7,587	90	7,590	
VI. Mulathmanna	1	34·63	43	84	2,908	..	..	84	2,908	90	3,116	
VII. Panangod	3	79·26	34	114	9,016	298	305	110	8,711	110	8,718	
IX. Walluwacheri	5 (*a*)	33·94	22	248	28,072	..	..	248	28,072	250	19,770	These two plantations were thinned on account of advanced growth.
	5 (*b*)	79·08	22									
X. Nellikutta	1	74·23	20	452	19,990	..	3,906	217	16,090	400	29,692	
	2	46·00	19	510	9,700	..	1,564	177	8,136	400	18,400	
XI. Chathamborai	1 (*b*)	107·56	18	246	26,472	8,067	7,755	174	18,717	400	43,024	

APPENDIX C.

DETAILS of experiments with exotics during and up to the close of the official year 1890–91.

Carob (*Ceratonia siliqua*)—has done well in North Coimbatore (Bylur).

Dates.—The palms raised from seeds, specially imported from Busrah in 1886 are doing well in North Arcot, where there are 37 plants from 2 to 2½ feet in height and 22 plants about one foot high. The latter have never been transplanted and were allowed to grow *in situ*. The offsets from Busrah planted in 1886 continue to do well. Three died during the year. Forty-four are at Tiruvallam and average 13 feet in height, whilst 43 at Kilminnel average only 5 feet. In the former, the plants were more frequently watered, and the soil too, is rather better. From the plants at Tiruvallam, 6 offsets have been taken, 3 of which have done well and 3 are sickly; from those at Kilminnel 120 offsets were taken during the year, but only 15 have survived the drought.

The number and condition of plants in South Arcot are reported as follows:—

Name of taluk or range.	Locality.	Casualties during 1890-91.	Number of plants existing on 31st March 1891.	Height. From (Feet.)	Height. To (Feet.)	Remarks regarding condition, &c.
Tiruvannámalai ..	Anaimalai reserved forest.	..	3	3	6	Not good owing to rocky soil.
	Do. do. ..	..	7	..	..	
Tindivanam ..	Siruvadi plantation.	..	17	¼	1½	Girth from 1 to 2½ inches; not improving in growth, though properly attended to.
Villupuram ..	Nabob's tope ..	9	31	..	..	Thriving well.
Cuddalore ..	Ramapuram ..	..	28	..	..	Not improving. The casualties are attributed to the soil being unsuitable and the failure of monsoon.
	Terkumelur ..	..	10	..	..	
	Rambaukam ..	5	2	..	..	
Tirukoilúr	Block No. 70 ..	33	17	½	6	Not very promising. Casualties resulted from want of rain.
Kallakurchi ..	Kasba nursery tope.	5	7	..	..	Not doing well, the soil being bad.
Vriddachalum ..	Blocks Nos. 125 and 127 and Head Assistant Collector's office compound.	14	46	..	..	Newly planted.

In Trichinopoly 19 plants survive on the Pachamalais, 3 having died during the year. Seventy seedlings raised in Pachamalais, and 70 others reared in the Range office compound in the plains, were planted on the hills during the year. The former were sickly plants and all perished.

In Tanjore, of the 175 plants which survived the planting of 1881 at Vettangudi, one died during the year and the rest are flourishing. Of the offsets planted in October 1889 in the south date garden, 114 survive and are mostly thriving. None of the trees flowered. The casualties during the year were 46. 36 palms in Edangankotai reserved land are promising, and are 6 to 13 inches in height. Forty plants and 62 offsets in the *Meltottam West Block* (Vedarniem) are not doing well. The District Forest-officer (Mr. Hayne) writes: "I consider the date palm planting an expensive experiment and, not commensurate in degree with the good to be derived, and should be discontinued." The Collector (Mr. Thomson) remarks thereon: "It is expensive; so far it does not appear to be at all profitable and should not be extended. But what has been planted, and reared so far should continue to be attended to till results good or bad are certain."

In North Coimbatore Arabian date seeds were sown during the year in the Bylur sandal-wood plantation in the Satyamangalam taluk, as the date is found to thrive best in that locality.

In Madura, 10 Egyptian seeds were sown in No. 1 range. They were at once attacked by large black ants and only 4 recovered, and of these only 2 germinated and are now in pits. In No. 2 range, 25 seeds were sown in the Periyakulam office garden and 25 in the Balasurem forester's house garden; of the former 22 germinated, but only 12 survive, which are now from 5 to 9 inches high; of the latter, 15 germinated and only 4 survive, which are now in pits.

In North Malabar of the 3 (Busrah) plants alive last year, 1 died, and the other two show no growth. All the bazaar date plants sent to Chedlet to be planted died, and all the Persian dates also perished. The District Forest-officer writes: "The date will not grow in the Wynaad, and it is useless prosecuting further experiments with it." The case appears to be different in South Malabar where there are 175 date palm plants in Wallnasherri block III, 153 in Punangode blocks I and II, and 38 in Pokode block IV, besides 29 plants of the Egyptian dates (raised from 50 seeds received in March 1890), all of which are doing well.

In South Canara, of the bazaar seed plants transplanted, 3 died during the year and of the 30 plants left in seed-bed at the end of the preceding year, 6 died. Of the Persian dates, 1 died, leaving 22. Of the Egyptian dates, 1 died, leaving 8.

In Chingleput, 60 seedlings (offsets from Busrah) are thriving; 5 died during the year. The Egyptian date seedlings have all withered away. The District Forest-officer remarks that the soil and climate are unsuitable. Of the plants raised from seeds of bazaar date fruits obtained from the West Coast (Calicut), 86 seedlings are in good condition. From the local bazaar dates, 31 seedlings were raised in the nursery, 24 of which were transplanted and are thriving.

Persian Gulf date palm seeds (some with pulp and some without) were obtained in December 1890 from the Director, Botanical Department, Northern India, Saharanpur, and forwarded to North Arcot, South Arcot, Salem and North Coimbatore for experiment. In the first-named district, 420 seeds *with pulp* were sown on 26th January 1891; 382 had germinated by 3rd March 1891. The seedlings look healthy. Out of 1,000 seeds *without pulp* sown simultaneously, only 560 germinated after about 36 days; of these 100 seedlings died; 45 look sickly; even the rest do not look healthy.

The best kind of Egyptian date palm seeds were also obtained from the Director of Botanical Department, Northern India, in March 1891 and supplied to several District Forest-officers in the circle for experiment. The result will be reported next year.

Divi Divi—does particularly well in North Arcot under the lofty shade of the rain tree, but, in the open, looks yellow and stunted. About 2,000 pods were collected during the year and sown in a nursery. 1,350 plants have come up excellently.

Eucalyptus.—In North Arcot all the plants of *E. citriodora* and *resinifera* perished during the hot season of 1890.

The total number of eucalypti plants in the nursery was 1,721 at the beginning of the year. 1,341 were put out into pits 4 feet deep during June—August 1890 in an enclosed area near Palmanér, but only 954 were found alive at the close of the year; of these 180 looked very sickly. *E. resinifera* and *citriodora* are probably doing best.

In Tinnevelly, *E. rostrata* and *resinifera* are doing well at an elevation of 2,500 feet, some having reached a height of 30 or 40 feet. These species were also planted at an elevation of 1,500 feet, but are not doing so well.

A supply of seed was sent to Quetta through the Conservator.

The number of the different species existing, their growth, &c., are as follows:—

Species.	Where existing.	Number.	Height.	Girth.	Remarks.
			FEET.	FEET.	
E. Rostrata	Kariar	12	8 to 40	$\frac{3}{4}$ to $2\frac{1}{2}$	Barometrical height 750 feet.
Do.	Kannikatti	6	30	$2\frac{1}{2}$ (average)	Do. 2,500 ,,
E. Robusta	Do.	26	20	1 (,,)	Do. 2,500 ,,
Do.	Ollar	7	20	1 (,,)	Nearly 2,000 feet high.

In North Malabar, the 5 largest trees of *Eucalpytus Marginata* called Saligna continue to grow satisfactorily. The dimensions of 4 of them are—

	As now reported.		As per report for 1889-90.		As per report for 1888-89.	
	Height.	Girth.	Height.	Girth.	Height.	Girth.
	FEET.	FEET.	FEET.	FEET.	FEET.	FEET.
No. 1	65	4	60	$3\frac{1}{4}$	50	$2\frac{1}{2}$
,, 2	56	$3\frac{1}{2}$	52	$2\frac{3}{4}$	42	$2\frac{1}{8}$
,, 3	42	3	37	$2\frac{1}{4}$	35	$2\frac{1}{12}$
,, 4	39	$2\frac{1}{2}$	35	$2\frac{1}{8}$	32	2

The 20 trees of *E. rostrata* whose average height was given last year as 45 feet and girth as $2\frac{1}{2}$ feet at 4 feet from the ground continue to flourish and average 50 feet in height and 3 feet in girth.

One fine tree of a third species (not identified by the Acting District Forest-officer) which was reported to be 45 feet high with a girth of 2 feet at 4 feet from the ground has now attained a height of 50 feet with a girth of 2½ feet. There are no plants of Queensland eucalyptus alive now in the experimental garden. In South Canara the *Corymbosa* gradually died away, the last in December, *i.e.*, at about 2 years of age; the 12 *Robusta* have continued to thrive and also the one *Citriodora*.

Giant Bamboos, &c.—In Chingleput seeds of Burmah bamboos (*D. Longispathus*) obtained from the Conservator of Forests, Pegu Circle, Burmah, were sown in nursery beds in the Meyur Tope, in the Tandarai Reserve and in the Homes' Gardens, Saidapet. In the first-named locality the seeds germinated in 8 days. The seedlings are from 2 to 3½ feet high and look healthy. In the second (Tandarai) most of the seeds germinated and the seedlings are 6 inches in height. In the third (Homes' Gardens) they have failed entirely. In Tinnevelly, the experiments with seeds of Giant Bamboo (*Bambusa Gigantea*) at Mundathorai is a failure. The seeds were carried away in a wholesale manner by ants.

In North Malabar *Dendrocalamus Brandissi* thrive well. The largest culm in the experimental garden is 90 feet in height and the thickest stems measure 13 inches in girth. The growth of about 300 other clumps is very satisfactory. Out of 700 clumps planted in Koogoor Hadi in 1888 about 600 are doing fairly well. In Kanot all the 34 cuttings made from the existing 5 clumps and planted in Takals (clearings) are doing well. The plants which were in the nursery last year have also been planted out in Takals; their average height is 10 feet with a circumference of 2 inches at the base.

The 4,593 plants of *Dendrocalantus longispathus* put out in the Takals last year (30 feet apart) are thriving well and possess vigorous shoots. They vary in height from 7 to 12 feet and in girth from 2 to 2½ inches. The 63 clumps of this kind of bamboo in the experimental garden continue to thrive. Most of those transplanted into Begur nursery in 1889 and removed and planted out in Takals have been destroyed by stray cattle; the rest are doing well.

The seeds obtained from Pegu in July 1890 were sown in Kanot and in the experimental garden, Manantoddy. The germination was very good in the former and fairly good in the latter. In Kanot, 14,000 seedlings were replanted 1 foot apart in beds in the nurseries. They are 9 to 12 inches high and fit for transplanting shortly. A larger number remained in the beds where seeds were sown and their transfer to other beds could not be effected in the absence of rain.

All the 13 clumps of *Cephalostachyum pergracile* existing in the experimental garden are growing satisfactorily. They average 20 feet in height with a girth of 10 inches to individual culms as against 18 feet and 9 inches, respectively, reported last year.

About 1,090 plants of this species were removed from the nursery at Kanot and planted out during the year in Takals; they average 7 feet in height with a girth of 1½ inches to individual culms; those transplanted in 1889 into the nursery at Begur are growing satisfactorily.

About 500 plants of *Beesha Travancorica* bamboos were put out in the Takals in Kanot; there are now 914 plants in all 10 to 15 feet in height and 3 to 4 inches in circumference and growing well. The 100 plants reported to be alive last year in the experimental garden continue to throw out vigorous shoots.

There are now 8 clumps of Golden Burmah bamboos in the experimental garden. The tallest shoots of the year average 30 feet in height with a girth of 10 inches. The one clump planted in 1886 in the nursery at Kanot is now 35 feet in height with a girth (of culm) of 8½ inches at the base as against 30 feet and 8 inches, respectively, last year. About 100 cuttings were made during the year and planted out in Takals. The 26 cuttings planted last year are thriving well.

The experiment of planting up of Takals (clearings) with Giant Bamboos may now be regarded a success both in Kanot and in Wynaad.

In South Malabar *Arundinacea Brandissi* and *Dendrocalamus longispathus* planted along river banks grows luxuriantly. A few were destroyed by the Government elephants.

Bambusa longispathus and *Cephalostachyum* planted in Pokode blocks IV and V are also growing very well.

The pretty old clump of yellow bamboos has had several additional culms and increased in size. The 4 cuttings are also doing well.

In South Canara the 41 clumps of *Bambusa longispathus* in Tannir Bhavi have not progressed much. The pure sand is not very suitable and they suffer from the proximity of the casuarina. Of the 9 plants in Sabladi, 8 were put out along a river bank. This was done in September instead of the beginning of June, and consequently the plants suffered. The one clump left has culms 2 inches in diameter and 7 feet high. Its general appearance is not satisfactory. The plants put out in the Uppinangadi range, which promised so well just afterwards at the close of the monsoon, have not done so well this last monsoon; hardly any produced good culms and some died. Out of 1,145 originally put out, there are now 1,020 and in a promising condition; they have to be watered; those similarly put out near Parapa have fared much the same, 30 have died, leaving now 150.

Ipecacuanha.—The report regarding the two plants in Kanot, *North Malabar*, is very unsatisfactory.

In *South Malabar*, of the 19 old plants which are under shade of teak, 6 broke close to the ground by the accidental falling of a branch; but they are expected to throw out fresh shoots from the roots. Of the 500 plants put down in 1888 by Mr. Lawson, 466 are doing well and the rest perished, but they should shoot up again at the break of the monsoon.

Kigelia pinnata.—In *North Arcot*, there are 10 in the Gudiyátam Forest-house compound and 10 in Palmanér, all doing well; one of the latter has flowered and been hand-fertilized by the District Forest-officer, two more are showing signs of flowering, 34 more have been planted around the new rest-house at Virinjipuram; those at Kilminnel (38) continue to grow well and rapidly and 4 will flower shortly. The 6 at Trivallam also continue to flourish. In *South Canara*, *Kigelia pinnata* grew well. Some that were cut back gave very good shoots.

Lancewood (*Oxandra Virgata*).—There are now 5 plants living in North Malabar (Wynaad). They grow but very poorly.

Mahogany (*Swietenia Mahogani*).—In *Chingleput*, there were 90 seedlings at the beginning of the year, of which 14 died and the rest are in good condition. Of the 180 seedlings raised in March 1890, 77 died and 103 are promising. The mahogany trees in the Chingleput tope had grown very bushy; all these were pruned; the wounds are healing up; the trees look healthy. Those in Meyur have thrown out 3 feet of vertical growth during the last 10 months, and are from 4 to 14 feet in height.

In *North Arcot*, of the 17 plants in Kilminnel, 1 died, leaving 16. The height ranges from 5 to 10 feet. There are also 10 left at Virinjipuram with an average height of 4 feet, out of 35 planted in 1888. They have not received good treatment.

In *South Arcot*, the number, height and the condition of the plants are reported as follows:—

Locality.	Number of plants existing on 31st March 1891.	Measurement.		Remarks.
		Height.	Girth.	
Annamalai reserved forest	8	7′ to 10′	4′ to 7′	7 in good condition and 1 poor.
Tenmalai Melput	18	1″ to 9″	1″ to 6″	12 are fair, rest poor.
,, nursery	1	..	..	Very small.
Tindivanam range, Siruvadi plantation.	27	1′ to 35½′	½″ to 9″	Not improving in growth, though properly attended to.
Villupuram range, Nabob's tope ..	17	..	..	Thriving well.
Cuddalore range, Ramapuram ..	27	2″ to 18′	3″ to 16″	Healthy and promising.
Do. Therkumelur ..	65	6′ to 8′	½′ to 2′	Healthy and promising, 5 died during the year, the roots having been attacked by white ants and other insects.
Tirukoilúr range, Block No. 71 ..	36	6′ to 27′	¾′ to 2¼′	Not very promising.

In Tanjore, out of the 20 plants which were alive in the Vettangudi forest, 6 died during the year and the surviving 14 are not promising. Of the 23 plants in the nursery, 3 died, leaving 20. In the South Date garden, only 4 miserable specimens now survive, their height varying from 5¾ to 21 feet and girth 6 to 22 inches. The Collector (Mr. Thomson) remarks: "It did not occur to me that Vettangudi was a place where mahogany should ever have been put down."

In Madura, the mahogany trees now standing in the garden at the Periyakulam office have grown uncommonly well. They are three years old, and are now 8 to 10 feet high (average). Some plants put down simultaneously in the Public Works-shed compound at Periyakulam are 10 to 15 feet high; 65 seeds were sent to No. IV Range officer, and 52 germinated; 100 seeds were sent to No. I Range officer, but of those which germinated, only 20 are now alive. Some plants which were put out some five years ago, near the teak plantation have not thriven at all.

In Tinnevelly, the plants in the Kongarayakurichi and Kaliyavur reserves, continue to do well.

In North Malabar, the 100 plants in Kanot vary from 10 to 26 feet in height, and 2 to 9½ inches in girth. The largest is 26 feet high, with a girth of 9½ inches. Nearly all the plants in the Experimental garden at Manantoddy are now dead from the attacks of a borer. The few remaining ones are sickly.

In South Malabar (Nilambúr), the one exceptional tree in Chattambarai, planted in 1873, which is now believed to be the variety known as *S. Macrophyllum*, made better advance in size during the year, the rate of growth being as follows :—

—	Height in feet.	Girth at base in inches.	Girth at 5 feet from the ground in inches.
When 10 years old or in 1883-84	65	42	30
,, 11 ,, ,, or in 1884-85	67	47	34½
,, 12 ,, ,, or in 1885-86	69	52	41
,, 13 ,, ,, or in 1886-87	70	56	44
,, 14 ,, ,, or in 1887-88	71	60	46
,, 15 ,, ,, or in 1888-89	74	64	50
,, 16 ,, ,, or in 1889-90	75	68	52
,, 17 ,, ,, or in 1890-91	79	73	55

The other plants in Irvillikava, Ramalur, and Panangod which are of the species of *S. Mahogani* must be regarded a failure; they suffered from the attack of the borer as usual. Eight hundred and forty-three *S. Macrophyllum* plants were planted as standards in the new teak plantation, Pockote block V. The growth is as good as the teak, and the plants are robust; 2,900 seeds of this species were put in bamboo pots; 2,500 have germinated: the seedlings are looking vigorous and healthy, and are intended for standards with teak in blocks V and VI.

Manilla hemp (*Musa textilis*).—The plants in *Tinnevelly* are in a healthy condition. Some of them flowered and fruited during the year. They are being successfully propogated by means of offsets. The growth of the plants in *North Malabar* (*Wynaad*) is all that can be desired.

Olea Europœa.—Of the 4 plants reported to be alive last year in *North Malabar*, 2 have died from the attacks of a caterpillar.

Peltophorum ferrugineum.—The 24 plants in Tanjore are in good condition. The height varies from 12¾ to 28½ feet and the girth from 1 to 3 feet. Nine flowered during the year.

Pithocolobium saman.—In *North Arcot*, the planting of this tree was overdone, and has been stopped in all the casuarina plantations. Cattle eat the pods greedily and the shade is most grateful. The tree wants watering during the first, and perhaps also the second year of its existence. In *South Arcot* the trees in Tenmalai Melput are mostly thriving. Those in Tindivanam, which are from 3 to 18 feet in height and 18 to 20 inches in girth, are not improving in growth. Those in Tirukoilúr are not also very promising. In North Malabar, there are 143 trees and the largest is now 45 feet high with a girth of 4 feet at 4 feet from the ground, as against 40 and 3½ feet, respectively, reported last year.

Rubber trees.—In *North Malabar*, the two trees of *Heavea Braziliensis* in the Experimental garden at Manantoddy continue to grow fairly well. Three germinated last year in Kanot and are growing fairly well. Their average height is 5 feet and girth ½ an inch. The Ceara rubber trees in the Experimental garden grow like weeds. The largest tree is 42 feet high with a girth of 4 feet at 4 feet from the ground, as against 38 feet and 3 feet and 1 inch, respectively, last year. The District Forest-officer is unable to say anything at present regarding the yield of rubber, as the trees do not yet bleed freely. The 200 plants of *Ficus elastica* put out in July 1887 in the Kanot forest are doing well, averaging in height 7 feet and in girth 3½ inches at the base. There are 6 plants in the Mukki cardamom forests whose average height is only 4 feet and girth 4 inches at the base; the soil appears to be unsuitable, being clayey. The plants put out near the ranger's house in the Chedlet forest in 1886 range from 11 to 16 feet in height with a girth of 6 to 14 inches; those planted in the Kurchyat forest in 1887 are also doing well: 190 plants put down in June 1886 in the Experimental garden at Manantoddy now average 6½ feet in height and 5 inches in girth at the base, as against 5 feet and 4 inches, respectively, last year. The largest tree in the garden (near the edge of the swamp) is 25 feet high with a girth of 18 inches at the base as against 22 feet and 16 inches, respectively, last year. The soil on the hill is stiff clay, and does not appear to suit. In *South Malabar* (Nilambúr), the *Castilloa*, *Hevea Braziliensis*, and *Ceara* continue to thrive; 600 Hevea seeds were sent to four other divisions in the Circle for experiment; 8 of the largest *Ceara* trees were tapped in 1886-87, but the yield of rubber was only one pound. There has been no tapping since; 36 *Landulphia Floria* are doing well. In *South Canara* some *Ceara* trees in the station thrive, but no rubber has been obtained from them. Some Hevea seed from Nilambúr was tried, but failed to germinate.

Sappan wood (*Cœsalpinia sappan*).—In *North Malabar* (Wynaad), of the 2,000 plants reported to be alive in Kanot, those planted in 1886, are now from 2 to 5 feet in height with a girth of ½ to 1½ inches. There are a good many plants now doing well, out of those which germinated last year, from the 50 seers of seed sown broad-cast.

Sericulture.—Experiments were continued at Homes Garden, Saidápet, near Madras, and at Meyur in Chingleput. In the former, an enclosure was put up; the sides were covered with half inch netting, painted with tar and linseed oil to make it water-proof. The top netting could not

be painted for want of sufficient funds. The top was completely covered with unpainted linen netting; but in course of time, the netting was torn to pieces through the influence of sun, wind, and rain. The 50 rows of casuarina seedlings planted, were properly conserved. A breeding shed was put up, the sides of which were closed with galvanized wire and the top covered with bamboo mats; within this, an enclosure, about 9 feet long, 6 feet broad and 9 feet high, was formed (for the keeping of the cocoons and the breeding of the worms from moths) with a margin of 3 feet all around for inspection, and it was covered with thread netting of $\frac{1}{8}$ inch meshes.

The experiment was tried at Saidápet and Meyur with 4,602 seed cocoons collected locally and from other districts.

The moths as they pierced had to rest either on the rows of cocoons, or on the netting, where a few of them paired.

To distinguish the covered female moths from the uncovered ones, the tip of one of the wings was cut off with a pair of scissors and, when separated from the male, (which is generally after 12 hours) they were caught and shut up in a small tin case, and kept on a table within the enclosure where they laid eggs, and thus, only fertilized eggs were collected. The date of commencement of laying was noted on the tin. The moths laid eggs for three days, and on the 4th day, the eggs were transferred to a smaller tin with the date marked on it, to ascertain the date of hatching, which was generally ten days after the transfer to the smaller tin. Four days after, the worms were removed outside the breeding shed, and let loose on the casuarina rows. To protect the worms from injury by ants, &c., a rag dipped in lamp oil was wrapped round each plant, about 6 inches from the ground; wood ashes were also spread at the roots.

In the beginning of July 1890, 1,901 worms were left on the casuarina hedges; of these, 475 spun their cocoons. In September, 343 cocoons were pierced, of which only 106 paired. From these, 12,311 fertilized eggs were collected and removed to Meyur. As the Honorable Mr. Garstin, C.S., had directed that no more should be left on the hedges, the remaining 13,360 eggs and 2,340 worms were also removed to Meyur. About $\frac{3}{4}$ of an acre of casuarina plantation here was cleared, and the worms were left on trees of two years' growth. Twenty worms were left on each tree, and this number was subsequently reduced to 10 on receipt of worms and eggs from Saidápet, lest the saplings should suffer from overstripping. A spacious shed was put up and 18 new nursery stands were prepared, and each day's worms were kept on separate stands, in order to ascertain the age of the worms at once.

Of the 25,671 eggs and 2,340 worms sent to Meyur, 1,861 spun their cocoons, which were removed to Saidápet. The experiment at Meyur was a thorough failure, as the worms all disappeared (most of them 3 weeks' old) mainly through the carelessness of the watchmen.

After several experiments, it was found, that about 8 days after hatching, is the safest age at which young worms might be removed from the nursery to the trees outside.

The Cocoons spun at Saidápet and Meyur seem quite unsuitable for breeding purposes.

The total expenditure during the year amounted to Rs. 1,505.

The experiment has not been financially successful so far.

APPENDIX D.

A DETAILED list of completed Forest buildings in the circle with their approximate cost, &c., as far as they have been reported by District Forest Officers.

Note.—The list is by no means complete. It is only a beginning, and next year more thoroughness may be expected.

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
				RS.			
Chingleput.	Tiruvallúr	Rest-house	Kambakkam	..	Roof thatched, 20′ square, with no out-house.	Used by Forest-officers on circuit.	
	Do.	Do.	Varadayapoliem ..	..	Roof tiled, do. do.	Do. do.	
	Do.	Range office ..	Satiavedu	..	Not given do. do	Used as Range office.	
	Do.	Do.	Nagalapuram ..	..	Do. do. do.	Do.	
North Arcot.	Chittoor	Rest-house	Paradarami	..	....	....	
	Chandragiri	Do.	Panapak	..	....	....	
	Do.	Range office ..	Chandragiri	..	....	....	
	Do.	Rest-house	Mamandur	..	....	....	
	Do.	Do.	Chamala	..	....	....	
	Palmanér	Do.	Palmanér	..	....	....	
	Do.	Do.	Peddur	..	....	....	
	Do.	Do.	Pednaigdrug	..	....	....	
	Do.	Do.	Nellipatla	..	....	....	
	Gudiyatam	Bungalow	Gudiyatam	..	....	....	
	Do.	Rest-house	Synagunta	..	....	....	
	Do.	Do.	Ambur	..	....	....	
	Polúr	Do.	Amerdi	..	....	....	
	Do.	Do.	Naickaneri	..	....	....	
	Do.	Do.	Karnatieghur ..	..	....	....	
	Do.	Do.	Mandaparai	..	....	....	
	Javadis	Do.	Patrakad	..	....	....	
	Wálajápet	Do.	Arkónam	..	....	....	
	Do.	Do.	Banavaram	..	....	....	
	Do.	Do.	Kilminnel	..	....	....	
	Gudiyatam	Do.	Virinjipuram ..	..	....	....	
	Do.	Do.	Tiruvallam	..	....	....	
South Arcot.	Tiruvannámalai ..	Do.	Chengam	300	1,441½ square feet in extent	Used as depôt and also by Inspecting officers.	
	Do. ..	Do.	Melpat (Tenmalai Hills).	750	1,189¼ do. do.	Used by inspecting officers ..	Is being repaired.
	Do. ..	Do.	Kavuthi	* 820	722½ do. do.	Do. do.	
	Tindivanam	Do.	Shanikulam	100	976¼ do. do.	Do. do.	Is being repaired.
	Tiruvannámalai ..	Range office ...	Tiruvannámalai ..	..	....	....	Permanently occupied, and is therefore not available for occupation by officers of other departments and private individuals.
	Do. ..	Tannah	Do.	..	....	....	Do. do.
	Tindivanam	Range office	Shanikulam	..	....	....	Do. do.
	Do.	Do.	Kallakurchi	..	....	....	Do. do.

* Excludes a sum of Rs. 306 spent on repairs.

A detailed list of completed Forest buildings in the circle with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of buildings and accommodation available.	How used.	Remarks.
				RS.			
South Arcot—*cont.*	Villupuram	Range office (old Court-house).	Villupuram	..	.....	....	Permanently occupied, and is therefore not available for occupation by officers of other departments and private individuals.
	Tindivanam	Depôt	Tindivanam	..	.....	....	Not fit to be used as a rest-house.
	Do.	Tannah	Kolamanyanur ..	..	.....	....	In complete ruins.
	Tindivanam	Police bungalow ..	Tindivanam	..	.....	....	In need of great repairs and not habitable, permanently handed over to the Forest by the Police Department.
Salem ..	Salem	Forest bungalow Rest-house.	Mallápuram ..	..	.....	....	
		Do. do. ..	Muttugampatti ..	..	.....	....	
Trichinopoly.	Kulitalai	Rest-house	Elamanur	..	.....	....	
	Do.	Do.	Lálápet	..	.....	....	
	Do.	Do.	Kulitalai	..	.....	....	
	Do.	Do.	Kálpatti	..	.....	....	
Tanjore.	Musiri	Do. on the Pachamalais.	Sengattupatti	..	.....	....	
	Northern Range ..	Residence and range office.	Tirumalavasal ..	..	Thatched building	One half as ranger's quarters and the other half as his office.	
	Satyamangalam ..	Ranger's quarters and store room.	Satyamangalam ..	..	Walls are of mud and with tiled roof	....	Transferred from Local Fund Department.
	Do. ..	Inspecting officer's residence.	Talamalai	250	30 feet long and 12′ broad, with mud walls and tiled roof.	Used by Inspecting officers.	....
	Do. ..	Do. ..	Ekkatur	250	32′ by 15′ with walls built of mud and tiled roof.	Do.	
	Do. ..	Residence of Forester.	Talavady	250	16 long by 8′ broad, with mud walls and tiled roof.	Used as Forester's residence.	
	Do. ..	Inspecting Officer's residence.	Hassanúre	350	40′ long by 12½′ broad	Used by Inspecting officers.	Transferred from Local Fund Department.
	Do. ..	Do. ..	Markampolliem ..	670	44′ long by 16′ broad, with mud walls and tiled roof.	Do.	
North Coimbatore.	Do. ..	Do. ..	Karalia	670	Do. do. do.	Do.	
	Do. ..	Do. ..	Geddasal	..	.....	....	Transferred from Local Fund Department.
	Do. ..	Do.	Gairmallam	800	44′ long by 16′ broad, with mud walls and tiled roof.	Used as Inspecting officer's residence.	
	Kollegál	Residence and Range office.	Kollegál	..	.....	....	
	Do.	Inspecting officer's residence.	Kowdally	250	33½′ long by 16½′ broad, with mud walls and tiled roof.	As residence of Inspecting officers.	
	Do.	Do. ..	Bylur	..	Walls are of mud and with tiled roof	Do. do.	
	Do.	Do. ..	Ponnachi	310	41′ long by 15′ broad with mud walls and tiled roof.	Do. do.	
	Do.	Do. ..	Alambady	310	Do. do. do.	Do. do.	
	Do.	Do. ..	Hanur	310	Do. do. do.	Do. do.	

A detailed list of completed Forest buildings in the circle with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
				RS.			
North Coimbatore —*cont.*	Kollegál	Inspecting officer's residence.	Thalabetta	570	41′ long by 15′ broad with mud walls and tiled roof.	As residence of Inspecting officer.	
	Do.	Do. ..	Gobinatham	570	Do. do. do. do. ..	Do. do.	
	Do.	Do. ..	Chengadi	250	33½′ long by 16½′ broad, with mud walls and tiled roof.	Do. do.	
	Bhaváni Range .	Ranger's quarters and store room.	Bhavani	350	41′ long by 15′ broad, do. do. ..	Do. do.	
	Do. ..	Do. ..	Tamarakarai	350	41′ long by 15′ broad, do. do. ..	Do. do.	
South Coimbatore.	Mettupálaiyam ..	Inspection shed ..	Tekkampatti ..	..	....	....	
	No. I Range ..	Residence and office ..	Mount Stuart ..	..	....	....	
	No. II ,, ..	Do. ..	Settumalai	..	....	....	
	No. VII ,, ..	Do. ..	Alanthorai	..	....	....	
	Do. ..	Do. ..	Bolampatti	..	....	....	
	No. VIII ..	Do. ..	Nonkarai	..	....	....	
	Do. ..	Do. ..	Sholakarai	..	....	....	
Madura.	Cumbum Valley ..	Residence and office ..	Cumbum	1,256	Extent 45′ by 30′, elevation 2′ from the ground; consists of 1 main room, 1 side room for the office, the other side room for the custody of records with a bath room, and also an out-house with kitchen and stables built of bricks and mud with tiled roof and plastered wall, the doors and windows being fixed.	Used as Ranger's residence and office.	
	Do. ..	Do. ..	Gúdalúr	695	Consists of 2 rooms (1 office room, 1 store-room and 1 bath room) with a verandah in front and on the rear; walls built of brick and mud and plastered with tiled roof, windows and doors fixed, and fenced all round.	Used as Forester's residence and office.	
	Do. ..	Rest-house	Vannathiparai ..	70	Consists of mud wall and thatched roof and is 15′ square in extent with a verandah 5′ wide all round.	Used by the Range officers and District Forest-officers while on inspection.	
	Do. ..	Do. ..	Cumbum	70	Do. do. ..	Range officer's residence during inspection.	
	Do. ..	Do. ..	Uttamapaleim ..	127	Do. do. ..	Used hitherto as Ranger's residence and office.	
	Do. ..	Do. ..	Combai	..	This building has a terraced roof built of brick and mortar; it contains 2 rooms.	Used by the Range officer and the District Forest-officer while on inspection.	Transferred from the Police Department.
	Palni Hill Range ..	Residence	Kodaikánal	3,267	Consists of 4 rooms of 12′ × 12′, 12′ × 14′, 12′ × 9½′, and 12′ × 9½′, respectively, 2 bath rooms and 1 store room with verandah on two sides. There are also kitchen, stables and godown.	Range officer's residence.	
	Do. ..	Office	Do. ..	..	Consists of 1 room for office and another for custody of records.	....	The cost of this is included in Range officer's quarters.

A detailed list of completed Forest buildings in the circle with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
				Rs.			
Madura.	Palni Hill range ..	Clerks' quarters ..	Kodaikánal	357	Consists of 2 rooms with a verandah 11′ × 11′. The walls are built of stone and mud and the roofing is of Calicut tiles.	Range clerks' residence.	
	Do. ..	Depôt-keepers' quarters and store room.	Gundan shola ..	893	Consists of 4 rooms, 3 of 10′ × 10′ each, and 1 of 8′ × 12′; the walls are of stone and mud, plastered and whitewashed; with a verandah of 6′ wide in front and a passage dividing the rooms on each side. Two rooms are set apart for office and store; roofing is of second-class wood and Calicut tiles. The doors and windows are of wood.	Depôt-keepers' residence and depôt store room.	
	Do. ..	Gardeners'and drivers' quarters and cattle shed.	Gundan shola ..	884	Gardeners' and drivers' quarters contain 8 rooms with walls of stone and mud and thatched roof; cattle shed consists of 3 rooms, 2 of 15′ × 12′ each, and 1 of 18′ × 12′; the walls of which are of stone and mud, with thatched roof and no doors.	....	
	Do. ..	Inspection shed ..	Periyakulam ..	1,084	This consists of 1 spacious room of 20′ × 14′ and 2 rooms of 12′ square with a verandah of 7′ wide on three sides. The walls are of brick and chunam and the roofing of first-class vengai wood. The main bulding is terraced and the verandah portion tiled. The doors and windows are all of wood, the latter having iron bars. The walls are plastered and whitewashed.	Used by the District Forest-officer and Range officer when on inspection.	
	Do. ..	Forester's quarters ..	Balasamudram ..	542	Similar to forester's quarters at Gúdalúr ..	Forester's residence	Including fencing charge, Rs. 41-9-6.
	Do. ..	Rest-house	Kookal	70	Has only one room of 14′ square and a verandah of 5′ wide all round. The walls are of wattle and dab, with the roof thatched.	Used by Range officer while on inspection.	
	Do. ..	Do.	Poombarai	80	Do. do. do. ..	....	
	Do. ..	Do.	Moolayur	70	Consists of one large room of 16′ square with a verandah all round, 5′ wide. The walls are of mud and whitewashed and the roofing is thatched.	Used by Range officer and also by District Forest-officer and occasionally by the officers of other departments.	
	Do. ..	Do.	Periyár	70	Do. do. do. ..	Used by Range officer only when on circuit.	
	Do. ..	Do.	Virupakshi	40	Has a single room 20′ × 12′ with mud walls and a 6′ verandah in front and one kitchen 12′ × 6′. The roof is a thatched one.	Do. do.	
	Do. ..	Do.	Kavalapatti	116	Has a single room of 18′ square with mud walls and a 5′ verandah all round and has a thatched roof.	Do. do.	

A detailed list of completed Forest buildings in the circle with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
				RS.			
Madura.—*cont.*	Palni Hill range ..	Rest-house	Devadanapatti ..	70	Has a room 15′ square and in all other respects is similar to that of Kavalapatti.	Used by Range officer only when on circuit.	
	Dindigul range ..	Range officer's quarters and office.	Kanavaipatti ..	1,130	Similar to the Range officer's quarters and office at Cumbum, except that jungle wood is used for bressummers, &c.	As Range officers' residence and office.	
	Do. ..	Rest-house	Sirumalai	70	This is 15′ square with mud walls and thatched roof and is in a dilapidated condition.	Used by the Range officer and the District Forest-officer when on inspection.	
	Alagar Hill range ..	Range officer's quarters and office.	Palamedu	* 1,125	Similar in description to the Range officer's quarters and office at Cumbum.	As Range officer's quarters and office.	* Amount adjusted up to end of April 1891.
Tinnevelly.	Papanasam hills ..	Rest-house	Kannikatti	..	.....	....	
	....	Do.	Kalivilaipil	..	.....	....	
	Manantoddy ..	Residence	Manantoddy ..	12,377	Built of burnt bricks and teakwood, partly iron roofed under Mangalore tiles. Consists of 11 rooms and a verandah in front 50′ 5″ wide and a portico. Rooms are of the following dimensions :— 19′ 7″ × 9′; 16′ 4″ × 18′ 10″; 16′ 4″ × 7′ 11″; 18′ 10″ × 15′ 10″; 15′ 10″ × 7′ 11″; 7′ 11″ × 7′ 11″; 15′ 11″ × 17′ 11″; 16′ 5″ × 7′ 10″; 16′ 11″ × 8′; 16′ × 8′; 7′ 10″ × 7′ 10″.	Residence for District Forest-officer.	District Forest-officer pays a rent of Rs. 25 per mensem.
North Malabar.	Do. ..	Stables	Do. ..	1,039	Built of burnt bricks and teakwood and tiled; has 6 rooms, one of 16′ 3″ × 10′ 2″ and 5 rooms of 10′ × 8″ 2′ each.	Used for tying horses and bullocks; and as residence of servants.	
	Do. ..	Cook room	Do. ..	604	Built of burnt bricks and teakwood and tiled; has 4 rooms and a verandah in front 5′ 10″. The rooms are 15′ × 12′, 12′ × 12′, 15′ 4″ × 4′ and 12′ × 4′.	Used as cook room and store.	
	Do. ..	Old office	Do. ..	669	There are 3 rooms of 22′ × 11′ 9″; 25′ × 16′ 10″; 9′ 10″ × 6′ 10″ with verandah on three sides 8′ wide.	Used as record rooms.	
	Do. ..	New office	Do. ..	651	Has 2 rooms of 20′ × 13′ and 12′ × 13′ with 8′ verandah in front and back, 16′ 3″ × 10′ 2″.	Used as office.	
	Do. ..	Gardeners' house ..	Do. ..	42	Has a room 16′ 3″ × 10′ 2″	Residence of gardener of the Manantoddy experimental farm.	
	Do. ..	Seed house	Do. ..	264	Built of teakwood and burnt bricks with glazed roof of 15′ 2″ × 10′ 8″ in dimension.	For raising plants.	
	Begur	Rest-house	Begur	1,143	Walled with teak planks and tiled, consists of two rooms of 16′ 2″ × 12′ and 11′ 8″ × 12′ and 4′ verandah in front.	Residence and office for the Range officer.	Was built by Mr. Peet in 1874 or 1875 at a cost of Rs. 1,000. It was a shingled one. It has been tiled at a cost of Rs. 142-13-1.
	Do.	Residence	Do.	574	Consists of 2 rooms 10′ × 10′ and a verandah all round 3′ wide.	Rest-house for the District Forest-officer.	

A detailed list of completed Forest buildings in the circle with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost as given by District Forest-officers.	Description of building and accommodation available.	How used.	Remarks.
				Rs.			
North Malabar—*cont.*	Begur	Elephant shed ..	Begur	602	It is of 58′ × 19′	Stabling elephants as well as residence for mahouts.	
	Do.	Mahout lines ..	Do.	561	Four rooms, each being 12′ × 9′		
	Do.	Store	Do.	375	Has one room 20′ × 12′ and another by 12′ × 12′ and verandah in front 3′ wide.	Storing provisions for elephants	
	Brammagiri	Rest-house	Brammagiri	1,026	Forest lodge built of rock and clay and roofed with iron; has 3 rooms, 14′ 3″ × 14′ 2″, 14′ 3″ × 14′ 2″ and 10½′ × 7′ with 4′ verandah in front.	Rest-house for District Forest-officer and Range officers for inspection.	
	Do.	Kitchen	Do.	197	Iron roofed and built of stone, bricks, &c., of 18′ 4″ × 11′ with a verandah 4′ 8″ in front.	Used as kitchen.	
	Tirunelly	Forest guard's station	Tirunelli	376	Built of mud with teak roof and tiled; has a room 17½′ × 9½′ with 5′ verandah all round.	Residence for forest guard.	
	Kakkery	Do. do. ..	Kakkery	242	Has a room 12′ × 12′ with verandah in front of 4′ wide; has the roof tiled.	Do. do.	
	Kaikaty	Do. do. ..	Kaikaty	230	Do. do. do. do. ..	Do. do.	
	Kartikolum	Do. do. ..	Kartikolum	230	Do. do. do. do. ..	Do. do.	
	Kuppadi	Residence and office.	Kuppadi	2,319	Built of sun-dried bricks and iron roofed; has 8 rooms, 2 of them being 14′ 6″ square, the other 2 being 14′ 3″ × 6′ 9″ and the remaining 4 being 6′ 9″ square each.	Residence and office for Range officer.	
	Dindinial	Do. do. ..	Dindinial	1,080	A bungalow with kitchen, &c., stable, built of burnt bricks and of different kinds of wood and tiled; has 11 rooms of 8¾′ × 8½′, 21′ × 8½′, 16¼′ × 8½′, 16½′ × 8½′, 8½′ × 8½′, 13′ × 18¾′, 16¾′ × 18¾′, 16¾′ × 16¾′, 16½′ × 27¼′, 13¾′ × 8½′, 8½′ × 8½′ in dimensions with 2 verandahs 34′ × 16¼′, 8½′ × 18¾′ and a porch 17′ × 21′ in front.	Rest-house for the District Forest-officer and Range officer.	Purchased from Messrs. Alston and Company.
	Mukkie	Do. do. ..	Mukkie	488	Wooden serambi, tiled; has 2 rooms 10′ square with a 3′ verandah all round.	Residence and office for Range officer.	
	Kanot	Do. do. ..	Kanot	416	Wooden serambi, tiled, bottom closed with sun-dried bricks; has 2 rooms of 10′ feet square each and a 4′ verandah all round.	Do. do.	
South Malabar.	Nilambúr	Inspection shed ..	Panangod	190	Serambi with tiled roofing; has a big room ..	Used as inspection shed by the District Forest-officers, Range-officers and Foresters.	
	Do.	Do. ..	Amarampalam ..	100	Serambi with thatched roof; has a room and is built of timber.	Do. do.	
	Do.	Office and residence ..	Nilambúr	5,000	A tiled bungalow built of laterite stone; has 6 rooms.	Ranger's quarters and Range office.	
	Do.	Office	Do.	2,000	Tiled house built of laterite stone; has 2 rooms.	Used as South Malabar District Forest-office.	

A detailed list of completed Forest buildings in the circle with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost as given by District Forest-officers.	Description of building and accommodation available.	How used.	Remarks.
				RS.			
South Malabar—*cont.*	Nilambúr	Residence	Nilambúr hill ..	13,469	One storied tiled bungalow with out-houses, built of laterite stone; consists of 4 rooms, a store and pantry.	District Forest-officer's quarters.	
	Amarampalam ..	Rest-house	Karumpoya	240	Serambi with thatched roof, built of timber and has 2 rooms.	Rest-house for District Forest-officer and Range officer.	
	Do. ..	Do.	Nellikutta	100	Serambi with thatched roof, built of timber and has only one room.	Do. do.	
	Do. ..	Do.	Korampoya	250	Serami with thatched roof, built of timber and has 2 rooms.	Do. do.	
	Do. ..	Residence	Nerattikadava ..	48	Serambi with thatched roof, built of timber and has only one room.	Amarampalam Range officer's quarters.	
	Pálghat range ..	Rest-house	Karimala	1,234	Bungalow having two rooms, built of sun-dried bricks, with iron roofing.	Used by the District Forest-officer and Range officer as rest-house.	
	Do. ..	Do.	Walayar	2,710	Tiled bungalow with out-houses, 3 rooms and 2 bath rooms and built of rough stone.	Rest-house for District Forest-officers of South Malabar and South Coimbatore.	
	Do. ..	Residence	Do.	655	Tiled house with 2 rooms built of rough stone ..	Forester's quarters (Walayar).	
	Do. ..	Office	Pálghat	..	Tiled bungalow (old munsif's court) with 4 rooms and built of bricks.	Pálghat Range office	Transferred from Public Works Department.
	Do. ..	Residence	Dhoni	117	A thatched building with out-houses is built of bamboo tatties and has a room.	Used by the District Forest-officer and Range officer.	
South Canara					*Nil.*		

APPENDIX E.

TRAMWAYS.

South Coimbatore.—The plant consists of the following :—

Seven miles of portable railway suitable for animal power (system A, page 12, Fowler's Catalogue of Light Railways, No. 43, Part IV) with steel rails, steel corrugated sleepers and wrought steel chairs riveted on full width of sleeper, 14 lb. per yard, 2 feet gauge ; 5 crossings ; 1 portable turn-table, 3 feet diameter ; 1 weighing machine, 3½ feet square ; 25 waggons, type H.H. of the Catalogue ; 1 tool box ; 4 eccentric tongs ; 8 extras :—

	RS.	A.	P.
The total cost of plant *plus* freight	42,447	13	9
Total cost of transport from Madras to the Anaimalais *plus* sundries	8,655	4	0
Cost of preparing the road and putting down the line ...	5,782	13	11
Total expenditure in 1888-89 ...	56,885	15	8
Cost of brakes purchased	245	1	6
Cost of preparing the road and putting down the line ...	2,955	13	6
Total expenditure in 1889-90 ...	3,200	15	0
Cost of wynch	260	0	5
Sundries (repairing trucks, &c.)	176	15	6
Cost of preparing the road and putting down the line ...	1,870	0	10
Total expenditure in 1890-91 ...	2,307	0	9
Grand Total of capital outlay ...	62,393	15	5
Deduct from the expenditure as shown above, the probable expenditure which would have been incurred for the maintenance of roads for cart traffic if there had been no tramway	2,393	15	5
Net amount of capital outlay on tramways ...	60,000	0	0

The following is the revenue or working account :—

As regular traffic on the line commenced only towards the end of 1889-90, the figures for the two years will be taken together.

Quantity of timber carried in			Actual expenditure.			Allowance for deterioration of plant at 6 per cent. per annum on Rs. 42,000.	Interest at 4 per cent. per annum on the capital outlay of Rs. 60,000.	Total cost by tramway.	Probable cost of carrying the same by country carts.	Average cost per cubic foot per mile by tramway.	Average cost per cubic foot per mile by common carts.
1889-90.	1890-91.	Total.	1889-90.	1890-91.	Total.						
C. FT.	C. FT.	C. FT.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS. A. P.	RS. A. P.
18,353	56,102	74,455	1,019	3,483	4,502	2,520	2,400	9,422	11,912	0 0 3	0 0 4

The District Forest-officer writes : " The present saving is not very considerable, but the more timber removed the greater will be the saving, and it is hoped that during 1891-92 after the arrival of the extra trucks and cranes a greater quantity will be removed. Further, it is now possible to remove a greater quantity of timber than hitherto, when only country carts were procurable, so there is an increase of revenue ; and it is found possible to fell and remove at a profit inferior classes of jungle-wood trees which were never removed before, and this will improve the condition of the forest. All this must be taken into consideration in gauging the value of the tramway.

" During the year, the line was extended to Sungam and very much straightened by the removal of curves. If the line could be extended to the foot of the ghât by means of a self-acting incline, a still greater saving would be effected, and it would then be possible to get out at a profit, from the top of the ghât, large quantities of bamboos and fuel, which cannot now be done by means of country carts."

North Arcot.—The plant consists of the following :—

Two miles of portable tramway (as that in South Coimbatore) ; 2 crossings ; 1 weighing machine ; 5 waggons, type J ; 1 waggon, type K ; 1 tool-box.

	RS.	A.	P.
The total cost of plant *plus* freight and carriage to the plantation site	10,815	8	11
Road-making, repairs, &c.	237	2	9
Total expenditure in 1888-89 ..	11,052	11	8
Road-making, repairs, &c., in 1889-90	296	7	3
New wheels purchased, repairs, &c., in 1890-91	179	0	0
Total Capital outlay ..	11,528	2	11
Deduct from the expenditure on roads as shown above, the probable expenditure which would have been incurred on such works for ordinary cart traffic	128	2	11
Net amount of Capital outlay on Tramway ...	11,400	0	0

The following is the revenue or working account :—

Quantity of wood carried in				Actual expenditure.				Allowance for deterioration of plant at 6 per cent. on Rs. 10,500.	Interest at 4 per cent. per annum on the capital outlay of Rs. 11,400.	Total cost by tramway.	Probable cost of carrying the same by country carts.	Average cost per ton per mile by tramway.	Average cost per ton per mile by country carts.
1888–89.	1889–90.	1890–91.	Total.	1888–89.	1889–90.	1890–91.	Total.						
TONS.	TONS.	TONS.	TONS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS. A. P.	RS. A. P.
940	1,824	1,495	4,259	88	226	*309	623	630	456	1,709	2,185	0 3 3	0 4 1

* Includes Rs. 168, being gateman's pay.

With reference to the rate of profit, the District Forest-officer writes :—" This does not perhaps read high, but it would have been much higher—

" (1) If we had not run short of line by nearly half a mile.

" (2) If the contractor had not failed in his contract, thus causing delivery of about 500 tons less than was expected.

" (3) If the working plan had allowed us to transport more, I calculate that less than one-third of the full working capability of the line was taken out.

" In taking into consideration the transport by carts, no allowance, of course, could be made for the following items which, however, are really very important :—

" i. Risk of loss by advances to bandymen.

" ii. Possible difficulty of procuring carts when most required.

" iii. Probability of strikes for higher rates."

APPENDIX F.

Outturn of coupes felled on the coppice with standard system in Tinnevelly during 1890-91.

Taluk.	Number of coupes.	Area.	Cost of felling demarcation, &c.	Total amount of outturn of wood in Tons.	Total amount of revenue realized.	Total net profit.	Average net profit per acre.	Average yield per acre in tons of wood.	Average yield per acre in cubic feet.
			RS. A. P.		RS. A. P.	RS. A. P.			
Srívilliputur	8	415	54 11 8	1,045	3,858 6 0	3,803 6 4	9	$2\frac{1}{2}$	135
Sankaranainárkoil	21	240	13 8 0	1,800	2,640 0 0	2,626 8 0	11	$7\frac{1}{2}$	405
Tenkási	19	150	57 0 8	2,460	4,620 0 0	4,562 15 4	$30\frac{3}{4}$	$16\frac{1}{20}$	891
Ambásamudram	5	190	402 5 4	1,540	2,811 2 6	2,699 4 8	$14\frac{4}{5}$	8	432
Nángunéri	3	300	..	2,130	2,181 4 0	2,181 4 0	$7\frac{1}{4}$	7	378
Total ..	56	1,295	527 9 8	8,975	16,110 12 6	15,873 6 4	12	$8\frac{1}{4}$	448

ANNUAL FORM No. 59.

Forest Department, Madras, Southern Circle.

AREA of Reserved Forests, 1890-91.

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Chingleput.	Tiruvallúr	Kambakkam	14,951	..	..	..	14,951	..	....	
		Sathiavedu	6,859	..	..	..	6,859	..	....	
		Ambakkam	5,259	..	..	..	5,259	..	....	
		Aradur	2,680	..	..	..	2,680	..	....	
		Kadur	2,494	..	..	..	2,494	..	....	
		Ugumudi	2,874	..	..	..	2,874	..	....	
		Allikuli	5,649	..	..	..	5,649	..	....	
		Nagalapuram	8,345	..	..	..	8,345	..	....	
		Pulrambakkam	577	..	..	..	577	..	....	
		Mylapore	..	..	930	..	930	..	No. 484, 30th October.	
		Vembedu	1,075	..	..	..	1,075	..	....	
		Alamadi	1,263	..	..	..	1,263	..	....	
		Tirukkalukunram	697	..	..	..	697	..	....	
		Oragadam	540	..	..	..	540	..	....	
		Madayattore	697	..	..	..	697	..	....	
		Vallam	1,328	..	..	..	1,328	..	....	
		Nemali	..	..	633	..	633	..	No. 147, 26th March 1890.	
		Alapakkam, A and B.	..	..	486	..	486	..	No. 150, 28th March 1890.	
		Vandalore	3,207	..	..	..	3,207	..	....	
		Kolathur (*alias*) Appur.	..	..	1,449	..	1,449	..	G.O., No. 941, 20th November.	
		Venkatapuram	119	..	..	..	119	..	....	
		Tiruteri	272	..	..	..	272	..	....	
		Paranur	..	..	378	..	378	..	No. 383, 9th August.	
		Kotankolatur	..	..	535	..	535	..	No. 372, 9th August.	
		Kavanur	..	..	569	..	569	..	No. 371, 9th August.	
		Siruvanjur	..	..	465	..	465	..	No. 256, 9th June.	
		Orathur	312	..	..	..	312	..	....	
		Vadakupattu	..	..	795	..	795	..	No. 380, 9th August.	
	Chingleput.	Kuttrambakam, A	..	..	126	..	126	..	No. 76, 12th February.	
		Do. B	..	..	205	..	205	..	No. 89, 18th February.	
		Puduppur	..	..	375	..	375	..	No. 149, 28th March.	
		Mannur	..	..	570	..	570	..	No. 134, 24th March.	
		Nallur	..	..	937	..	937	..	No. 87, 18th February.	
		Manganiyam	..	..	946	..	946	..	No. 136, 24th March.	
		Kalvayi	..	..	138	..	138	..	No. 70, 6th February.	
		Kolattur	..	..	1,909	..	1,909	..	No. 146, 26th March.	
		Kayar	..	..	642	..	642	..	No. 69, 6th February.	
		Taiyur	..	..	1,084	..	1,084	..	No. 246, 9th June.	
		Sonallur	..	..	1,107	..	1,107	..	No. 97, 28th February.	
		Unamanjeri	..	..	750	..	750	..	No. 291, 30th June.	
		Alathur	..	..	488	..	488	..	No. 267, 20th June.	
		Illalur	..	..	692	..	692	..	No. 293, 30th June.	
		Hanumantaputteri	..	..	286	..	286	..	No. 206, 21st May.	
	Saidápet.	Tandrai	664	..	..	..	664	..	....	
		Pulikaradu	..	..	176	..	176	..	No. 236, 4th June.	
		Tambaram	..	..	262	..	262	..	No. 321, 21st July.	

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Chingleput—*cont.*	Saidápet—*cont.*	Kadapperi	..	..	227	..	227	..	No. 225, 3rd June.	
		Selaiyur	..	..	498	..	498	..	No. 349, 28th July.	
		Madurapakam ..	..	..	351	..	351	..	G.O., No. 7, 20th December.	
		Nanmangalam ..	..	..	328	..	328	..	G.O., No. 931, 18th November.	
		Eurumaiyur	..	..	192	..	192	..	G.O., No. 294, 30th June.	
		Perumbakam, A ..	..	..	636	..	636	..	G.O., No. 953, 22nd November.	
		Do. B ..	..	..	117	..	117	..	G.O., No. 739, 19th September.	
		Maiyur	..	..	534	..	534	..	G.O., No. 423, 19th September.	
		Sikkarayapuram ..	..	..	93	..	93	..	G.O., No. 7, 20th December.	
		Kuttambakam ..	..	..	300	..	300	..	G.O., No. 331, 21st July.	
		Mittanalai	..	..	267	..	267	..	G.O., No. 461, 18th October.	
		Tirumalavayal ..	..	..	386	..	386	..	G.O., No. 543, 6th December.	
		Nandrambakam ..	..	..	259	..	259	..	G.O., No. 444, 3rd October.	
		Total ..	59,862	93·54	21,121	..	80,983	126·54		
North Arcot.	Chittoor.	Paradarami	15,043	..	..	..	15,043	..	....	
		Pachigunta	1,800	..	..	..	1,800	..	....	
		Kinatipalli	..	..	1,417	..	1,417	..	No. 460, 21st October.	
		Chilapalli	..	..	1,296	..	1,296	..	No. 263, 24th June.	
		Penamur	..	..	6,400	..	6,400	..	No. 462, 21st October.	
	Chandragiri.	Napier reserve ..	8,772	..	..	..	8,772	..	....	
		Mamandur reserve ..	1,776	..	..	..	1,776	..	....	
		Chamala reserve ..	9,600	..	..	..	9,600	..	..	
		Panapak ,, ..	6,400	..	..	..	6,400	..	....	
		Pudipatla bail ..	2,560	..	..	..	2,560	..	....	
		Gazulamandiyam ..	250	..	..	..	250	..	....	
		Mamandúr extension.	..	..	8,000	..	8,000	..	No. 481, 4th November.	
		Tirupati Hill ..	..	..	16,000	..	16,000	..	No. 482, 4th November.	
	Palmanér.	Musalimadugu ..	9,600	..	..	..	9,600	..	....	
		Basvireddipalle ..	10,240	..	..	..	10,240	..	....	
		Peddur	9,600	..	..	..	9,600	..	....	
		Palmanér tope ..	2	..	..	..	2	..	....	
		Nagamangalam ..	31	..	..	..	31	..	....	
		Pedugavaripalle ..	20	..	..	..	20	..	....	
		Venkatagirikota ..	4	..	..	..	4	..	....	
		Byreddipalle	4	..	..	..	4	..	....	
	Palmanér and Gudiyátam.	Mortana	16,000	..	..	..	16,000	..	....	
		Naickaneri	6,400	..	..	..	6,400	..	....	
	Gudiyatam.	Ambúr drug	5,760	..	..	..	5,760	..	....	
		Tiruvallam plantation.	435	..	..	..	435	..	....	
		Virinjipuram plantation.	260	..	..	..	260	..	....	
		Cheynur tope ..	130	..	..	..	130	..	....	
		Amundi plantation ..	160	..	..	..	160	..	....	
		Tandrayagunta tope ..	2	..	..	..	2	..	....	
		Vikramasi	161	..	..	..	161	..	....	
	Vellore ..	Ambúr fuel coupe ..	3,840	..	..	..	3,840	..	....	
		Palamadi	6,400	..	..	..	6,400	..	....	
		Ambúr tope	5	..	..	..	5	..	....	

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
North Arcot—*cont.*	Pólúr ..	Carnatic Ghur ..	7,069	..	..	..	7,069	..	....	
		Ammerdi plantation ..	25	..	..	..	25	..	....	
	Vellore and Pólúr.	Tellai	15,121	..	..	..	15,121	..	....	
	Pólúr ..	Puttur	12,800	..	..	..	12,800	..	....	
		Patrakad	19,200	..	..	..	19,200	..	....	
		Virappanur	64,000	..	..	..	64,000	..	....	
	Arcot ..	Punganúr	3,743	..	..	..	3,743	..	....	
		Kilminnel plantation .	150	..	..	..	150	..	....	
		Sennaleri	1,675	..	..	..	1,675	..	....	
	Wálajápet.	Vannivedu plantation.	30	..	..	..	30	..	....	
		Arkónam Sub-Magistrate's office compound.	5	..	..	..	5	..	....	
		Arkonam tope ..	37	..	..	..	37	..	....	
		Gúdalúr	535	..	..	..	535	..	...	
		Anantapuram or Urúr.	540	..	..	..	540	..	....	
		Ammanur	203	..	..	..	203	..	....	
		Banavaram	..	..	1,051	..	1,051	..	No. 56, 27th February.	
	Wandiwash.	Brammakateri ..	635	..	..	..	635	..	....	
		Total ..	241,023	376·60	34,164	..	275,187	430·00		
South Arcot.	No. I, Tiruvannámalai.	Annamalai	2,640	..	..	..	2,640	..	....	
		Chinnasamudram ..	3,769	..	..	..	3,769	..	....	
		Mudenai	6,464	..	..	..	6,464	..	....	
		Perungolatur swamimalai.	9,312	..	..	..	9,312	..	...	
		Anándavadi	8,672	..	..	..	8,672	..	....	
		Kavuttumalai ..	10,032	..	..	..	10,032	..	....	
		Tippakadu	4,544	..	..	102	4,442	..	Declared unreserved (Board's Proceedings, No. 581, 20th September.)	
	No. II, Tindivanam.	Siruvadi	4,608	..	..	..	4,608	..	....	
		Muttakadu	4,053	..	..	..	4,053	..	....	
		Karai	1,697	..	..	..	1,697	..	....	
		Agaram	600	..	..	..	600	..	....	
		Merkanam	80	..	..	..	80	..	....	
		Kurumbaram, 2nd bit.	192	..	..	..	192	..	....	
		Kumalampatti ..	1,201	..	..	..	1,201	..	....	
		Sevur	1,200	..	..	..	1,200	..	....	
		Panchalam	..	..	1,120	..	1,120	..	No. 511, 25th November.	
		Venmaniyattur ..	486	..	..	..	486	..	....	
		Peradikuppam ..	..	..	729	..	729	..	No. 348, 5th August.	
		Akkur	..	..	1,350	..	1,350	..	No. 347, 5th August.	
		Saram	243	..	..	..	243	..	....	
		Salavadi	64	..	..	..	64	..	....	
		Jakkampettai ..	300	..	..	..	300	..	....	
		Adikuppam	150	..	..	..	150	..	....	
		Ashikadu	450	..	..	..	450	..	....	
		Gangavaram	13,276	..	..	..	13,276	..	....	
		Nabob's tope	70	..	..	3	67	..	Declared unreserved (Board's Proceedings, No. 581, 20th September.)	
	No. III, Villupuram.	Vakkur	..	..	384	..	384	..	No. 270, 24th June.	
		Vikkravandi	..	..	256	..	256	..	No. 51, 17th February.	
		Satanur, 1st bit ..	..	..	204	..	204	..	No. 415, 1st December.	
		Narasinganur ..	..	..	428	..	428	..	No. 386, 19th August.	

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
South Arcot—*cont.*	No. III, Villupuram—*cont.*	Gundalapuliyur ..	..	..	940	..	940	..	No. 79, 3rd March.	
		Karanai	..	..	128	..	128	..	No. 431, 30th September.	
		Adanur	1,491	..	..	..	1,491	..	....	
		Ariyalúr	..	..	1,036	..	1,036	..	No. 281, 1st July.	
	No. IV, Cuddalore.	Vellakarai	..	..	1,568	..	1,568	..	No. 322, 22nd July.	
		Valudalampattu ..	..	..	908	..	908	..	No. 376, 19th August.	
		Sammattikuppam ..	364	..	..	..	364	..	....	
		Marungur	224	..	..	..	224	..	....	
		Vegakottai	..	..	480	..	480	..	No. 257, 24th June.	
		Vadakottu	..	..	3,084	..	3,084	..	No. 72, 11th February.	
		Valudayampattu ..	..	..	1,536	..	1,536	..	No 72, 24th February.	
		Kanjiruppu, 1st bit ..	..	..	2,956	..	2,956	..	No. 389, 26th August.	
		Velankuppam ..	..	..	1,094	..	1,094	..	No. 333, 29th July.	
		Shonankuppam ..	..	..	140	..	140		No. 436, 30th September.	
		Total ..	76,182	119·03	18,341	105	94,418	147·53		
Salem.	Salem ..	Bodamalai	5,600	..	..	..	5,600	..	....	
		Atur ghât	3,142	..	..	..	3,142	..	....	
		Mallapuram ghât ..	..	..	2,285	..	2,285	..	No. 364, 12th August.	
		Nartanchedu ..	2,400	..	..	..	2,400	..	....	
		Vaniyar	4,512	..	..	..	4,512	..	....	
		Kutar	3,795	..	..	..	3,795	..	....	
		Manjavadi ghât ..	8,461	..	..	..	8,461	..	....	
		Mallapuram ghât extension.	..	..	640	..	640	..	No. 367, 12th August.	
		Ajjampatti	1,920	..	..	..	1,920	..	....	
		Nartanchedu extension.	1,088	..	..	..	1,088	..	....	
		Yerimalai	3,520	..	..	..	3,520	..	....	
		Kanavoipudur ..	3,200	..	..	..	3,200	..	....	
		Lokur	5,312	..	..	..	5,312	..	....	
		Pillapallikombai, New.	2,080	..	..	..	2,080	..	....	
		Atúr ghât extension.	544	..	..	..	544	..	....	
		Kanjeri, New ..	4,032	..	..	..	4,032	..	....	
		Pannikaradu ..	4,832	..	..	..	4,832	..	....	
		Mallapuram	589	..	..	..	589	..	....	
		Karuvattuparai ..	1,800	..	..	..	1,800	..	....	
		Gundakal	4,000	..	..	..	4,000	..	....	
		Manakonda	5,500	..	..	..	5,500	..	....	
		Puliyankidai ..	..	..	1,000	..	1,000	..	No. 71, 24th February.	
		Mattikottai	..	..	3,500	..	3,500	..	No. 201, 20th May.	
		Pungamadavi ..	..	..	2,500	..	2,500	..	No. 195, 20th May.	
		Godumalai	7,000	..	..	..	7,000	..	....	
		Jalluttu	12,000	..	..	..	12,000	..	....	
		Kanjamalai	..	..	4,500	..	4,500	..	No. 507, 25th November.	
		Mary Land	..	..	400	..	400	..	No. 264, 24th June.	
	Atúr ..	Varagur	2,675	..	..	..	2,675	..	....	
		Nayakenkombai ..	2,880	..	..	..	2,880	..	....	
		Bylur	6,880	..	..	..	6,880	..	....	
		Nagur	3,757	..	..	..	3,757	..	....	
	Námakal ..	Jambuttu	2,617	..	..	..	2,617	..	....	
		Puliyanshola ..	5,530	..	..	..	5,530	..	....	
	Atúr and Námakal.	Karavallikombai ..	8,755	..	..	..	8,755	..	....	
									....	
	Uttankarai.	Pallipatti	8,000	..	..	..	8,000	..	....	
		Thambakal	7,757	..	..	..	7,757	..	....	
		Chitteri	3,917	..	..	..	3,917	..	....	
		Chittilingi	6,880	..	..	..	6,880	..	....	
		Kottapatti	8,960	..	..	..	8,960	..	....	
		Puvampatti	4,672	..	..	..	4,672	..	....	

Area of Reserved Forests 1890–91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Salem—*cont.*	Uttankarai—*cont*	Singarapet	2,624	..	..	..	2,624	..		
		Mallapuram extension	400	..	..	..	400	..		
	Tirupatúr.	Mangalam	6,080	..	..	..	6,080	..		
		Nagaluttu	2,560	..	..	..	2,560	..		
		Mambakam	9,370	..	..	..	9,370	..		
		Pungolam	7,834	..	..	..	7,834	..		
		Mudukaddappu	2,048	..	..	..	2,048	..		
		Jalarpet	1,216	..	..	..	1,216	..		
		Narasingapuram	2,048	..	..	..	2,048	..		
		Kalarapatti	2,016	..	..	..	2,016	..		
		Alangayam	11,520	..	..	..	11,520	..		
	Tirupatur and Uttankrarai.	Singarapet extension.	7,398	..	..	..	7,398	..		
	Tirupatur and Krishnagiri.	Kótúr	3,840	..	..	..	3,840	..		
	Hosur	Ayyur	5,952	..	..	..	5,952	..		
		Marandahalle	5,824	..	..	..	5,824	..		
		Gulhatti, New	7,942	..	..	..	7,942	..		
		Manchi, New	5,632	..	..	..	5,632	..		
		Jowlagiri	6,016	..	..	..	6,016	..		
		Talle	6,368	..	..	..	6,368	..		
		Naganur	3,200	..	..	..	3,200	..		
		Denkanikota	2,816	..	..	..	2,816	..		
		Toluvabetta	6,919	..	..	..	6,919	..		
		Anchetti	8,832	..	..	..	8,832	..		
		Natrapalaiyam	10,880	..	..	..	10,880	..		
		Biligundla	14,272	..	..	..	14,272	..		
		Kestur	11,616	..	..	..	11,616	..		
		Billikal	11,136	..	..	..	11,136	..		
		Mallahalli	8,928	..	..	..	8,928	..		
		Taggatti	10,432	..	..	..	10,432	..		
	Dharmapuri.	Pennagaram	10,304	..	..	..	16,304	..		
		Morappur	16,640	..	..	..	16,640	..		
		Bianurmalai	..	..	11,500	..	11,500	..	No. 508, 25th November.	
	Hosúr and Dharmapuri.	Woddapatti	17,152	..	..	..	17,152	..		
		Gutirayen	15,776	..	..	..	15,776	..		
	Krishnagiri.	Burgur, New	1,920	..	..	..	1,920	..		
		Togarapalli	900	..	..	..	900	..		
	Tiruchengód.	Pakkanad	4,500	..	..	..	4,500	..		
		Total	411,518	643·00	26,325	..	437,843	684·13		
Trichinopoly	Trichinopoly.	Tuvakudi	1,438	..	..	..	1,438	..		
	Kulitalai.	Elamanur	117	..	..	..	117	..		
		Pettavoitalai	137	..	..	..	137	..		
		Kulitalai	77	..	..	..	77	..		
		Manatattai	45	..	..	..	45	..		
		Lalapet	268	..	..	..	268	..		
		Sittalavoi	160	..	..	..	160	..		
		Kattalai	75	..	..	..	75	..		
		Tainimalai	464	..	..	..	464	..		
		Minnakaradu	98	..	..	..	98	..		
		Panjantangi	1,543	..	..	..	1,543	..		
		Viramalai Hills	5,472	..	..	..	5,472	..		
		Poiyapatti do.	639	..	..	..	639	..		
		No. 1, Shemmalai	2,477	..	..	..	2,477	..		
		Pakkiri Karadu	65	..	..	..	65	..		
		Puttanatam range comprising Karumalai, Palamalai and Nadumalai	705	..	..	..	705	..		
		Surpam range	1,403	..	..	..	1,403	..		
		Mathalamalai	465	..	..	..	465	..		
		Maradur	..	..	180	..	180	..	No. 441, 7th October.	
		Mayanur	..	..	50	..	50	..	No. 442, 7th October.	

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Trichinopoly—*cont.*	Kulitalai—*cont.*	No. II, Shemmalai ..	..	..	1,593	..	1,593	..	No. 443, 7th October.	
		Sigam Karadu ..	..	..	714	..	714	..	No. 105, 4th March 1890.	
	Musiri ..	Sengattupatti ..	3,000	..	..	..	3,000	..	....	
		Melúr	3,000	..	..	..	3,000	..	....	
		Kaliammankoil tittu,	1,500	..	..	..	1,500	..	....	
		Karuppankadu tittu.	2,000	..	..	..	2,000	..	....	
		Kanapadi kanpimarsolai.	2,560	..	..	..	2,560	..	....	
		Kanapadi Thenparanád.	12,000	..	..	..	12,000	..	....	
	Perambalúr.	Palamalai	10,000	..	..	..	10,000	..	....	
		Manalodai	4,000	..	..	..	4,000	..	....	
		Solamatte	7,000	..	..	..	7,000	..	....	
		Selaiyur	1,600	..	..	..	1,600	..	....	
		Puliyur	10,000	..	..	..	10,000	..	....	
		Semmalai	5,000	..	..	..	5,000	..	....	
		Sengattúr	10,000	..	..	..	10,000	..	....	
	Udayárpálaiyam.	Adanakurichi ..	250	..	..	..	250	..	....	
		Malangankudiyiruppu	150	..	..	..	150	..	....	
		Tennamanallur ..	..	..	10	..	10	..	No. 375, 19th August.	
		Valakkurichi.. ..	..	..	48	..	48	..	No. 377, 19th August.	
		Total ..	87,708	137·05	2,595	..	90,303	141·09		
Tanjore.	Southern Range.	Block No. 2, Meltottam eastern block.	10	..	..	..	10	..	....	
		Block No. 3, Meltottam western block.	8	..	..	..	8	..	....	
		Manakadu	120	..	..	..	120	..	....	
		Talanayar	2,000	..	..	..	2,000	..	....	
		Tillaivilagam ..	320	..	..	..	320	..	....	
		Nedur No. 2	200	..	..	..	200	..	....	
		Thatchankurichi ..	320	..	..	..	320	..	....	
		Veralipatti, North block.	145	..	..	..	145	..	....	
		Veralipatti, South block.	234	..	..	..	234	..	....	
		Kallupatti	85	..	..	..	85	..	....	
		Kollangarai	458	..	..	..	458	..	....	
		Puttur No. 1 ..	191	..	..	..	191	..	....	
		Nadur No. 1 ..	1,000	..	..	..	1,000	..	....	
		Puttur No. 2 ..	119	..	..	..	119	..	....	
	Northern Range.	Northern casuarina ..	350	..	..	..	350	..	....	
		Southern do. ..	250	..	..	..	250	..	....	
		Neduvasal	42	..	..	..	42	..	....	
		Total ..	5,852	9·14	..	..	5,852	9·14		
North Coimbatore.	Kollegál..	Jadatalahulla.. ..	361	..	..	..	361	..	....	
		Udayárpálaiyam ..	297	..	..	..	297	..	....	
	Satyamangalam.	Bylore	1,186	..	..	..	1,186	..	....	
		Germalam	520	..	..	..	520	..	....	
		Vellamundi	12,800	..	..	..	12,800	..	....	
		Eastern slopes of Nílgiris.	60,800	..	..	..	60,800	..	....	
		Total ..	75,964	118·69	..	..	75,964	118·69		
South Coimbatore.	No. 1, Tunacadavu and No. 2, Polláchi.	Anamalais, No. 1 ..	52,480	..	..	..	52,480	..	....	
	No. 2, Polláchi.	Do. ,, 2 ..	3,140	..	..	..	3,140	..	....	
	No. IV, Udamalpet	Do. ,, 3 ..	47,360	..	..	..	47,360	..	....	

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
South Coimbatore—*cont.*	No. II, Pollachi and Udmalpet.	Anamalais	133,120	..	..	..	133,120	..	....	
	No. VII, Bolampatti and VIII, Sholakarai.	Bolampatti block No. I.	47,680	..	..	..	47,680	..	....	
	No. VII, Bolampatti.	Bollampatti block No. II.								
		Bollampatti block No. III.								
		Tadagam No. IV ..	30,720	..	..	..	30,720	..	....	
	No. VI, Mettupálaiyam	Gopanari V..	38,200	..	..	..	38,200	..	....	
		Kempampálaiyam VI.								
		Nellitorai VII ..								
		Odanthorai VIII ..	5,880	..	..	..	5,880	..	....	
		Modur IX ..	3,600	..	..	..	3,600	..	....	
	No. VIII, Sholakarai range.	Small Sholakarai reserve.	81	..	..	..	81	..	....	
		Total ..	362,261	566·03	..	..	362,261	566·03		
Madura.	I. Cumbum valley.	*Cumbum Valley, east.*								
		Block No. 1, Kuttinachiar.	640	..	..	..	640	..	....	
		Block No. 2, Surulipatti.	5,760	..	..	..	5,760	..	....	
		Block No. 3, Pandaratorai.	300	..	..	..	300	..	....	
		Block No. 4, Vannatiparai.	27,482	..	* 38	..	27,520	..	....	* The result of measurements taken from the 1 inch taluk maps supplied only recently by the Madras Survey Department, the areas in former years having been only roughly estimated in the absence of such maps.
		Block No. 5, Melagudalur.	1,280	..	..	..	1,280	..	....	
		Cumbum Valley, west.								
		Block No. 1, Suranganar.	3,616	..	..	..	3,616	..	....	
		Block No. 2, Matchakal.	2,560	..	..	..	2,560	..	....	
		Tambirankanal ..	250	..	* 6	..	256	..	....	
	II. or Palni Hill Range.	*Palni Hills, Southern slopes, west.*								
		Block No. 1, Amburivi.	3,840	..	..	..	3,840	..	....	
		Block No. 2, Sengalvaraiar.	5,210	..	..	..	5,210	..	....	
		Block No. 3, Karungaldhonimedu.	..	..	1,920	..	1,920	..	G.O., Nos. 350, 350-A, 20th May.	
		Block No. 4, Pambar.	4,755	..	..	* 512	4,243	..	....	
		Block No. 5, Adukkam.	..	..	3,200	..	3,200	..	G.O., Nos. 576, 576-A, 21st July.	
		Palni Hills, Southern slopes, east.								
		Block No. 1, Marudanadiar.	6,528	..	..	..	6,528	..	....	
		Block No. 2, Kadugatadi.	1,280	..	..	..	1,280	..	....	
		Block No. 3, Arunkanal.	2,560	..	..	* 640	1,920	..	....	
		Block No. 4, Arunkanal shola.	..	..	* 32	..	32	..	....	

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		Palni Hills, Southern slopes, east—cont.								
		Block No. 6, Unjalanchi.	..	..	256	..	256	..	G.O., Nos. 102, 102-A, 12th February 1891.	
		Varatharkanal ..	200	..	..	* 40	160	..	....	
		Iruttarkanal	100	..	..	..	100	..	....	
		Pambukkalar ..	800	..	..	..	800	..	....	
		Kokkuparai	..	..	320	..	320	..	No. 536, 2nd December.	
		Palni Hills, Northern slopes, east.								
		Block No. 1, Siruvattukadu.	2,279	..	..	..	2,279	..	....	
		Block No. 2, Northern slopes.	..	..	12,800	..	12,800	..	G.O., Nos. 1025, 1025-A Rev., 19th December.	
		Block No. 3, Vennilai.	4,800	..	..	..	4,800	..	....	
		Block No. 4, Kanienkadu.	3,002	..	..	..	3,002	..	....	
		Block No. 5, Norchiarkad.	200	..	..	..	200	..	....	
		Block No. 6, Talaiarandarkovil kad.	30	..	..	..	30	..	....	
		Palni Hills, Northern slopes, west.								
		Block No. 1, Pumbarai Vilpatti valley.	13,587	..	..	..	13,587	..	....	
		Block No. 2, Velancombai	1,600	..	..	..	1,600	..	....	
		Block No. 3, Velancombai plantation.	54	..	..	..	54	..	....	
Madura.	II or Palni Hill Range—*cont.*	Block No. 4, Oliyanathuodai.	3,200	..	..	..	3,200	..	....	
		Block No. 5, Kukkal.	9,645	..	..	..	9,645	..	....	
		Block No. 6, Kudraiyar.	10,061	..	..	..	10,061	..	....	
		Perumalmalai.								
		Block No. 1, Perumalmalai.	12,800	..	..	..	12,800	..	....	
		Block No. 2, Thogavarai shola.	..	..	* 32	..	32	..	....	* The result of measurements taken from the 1 inch taluk maps supplied only recently by the Madras Survey Department, the areas in former years having been only roughly estimated in the absence of such maps.
		Block No. 3, Talaiarkadu.	150	..	..	..	150	..	....	
		Block No. 4, Kadamaravu.	50	..	..	..	50	..	....	
		Kallar.								
		Block No. 1, Kallar.	9,600	..	..	..	9,600	..	....	
		Block No. 2, Ariyanuttukanal.	64	..	..	..	64	..	....	
		Block No. 3, Kumangovaimalai.	80	..	..	..	80	..	....	
		Lower Palni sholas.								
		Block No. 1, Kadavu.	..	..	* 64	..	64	..	....	
		Block No. 2, Petrankanal.	80	..	..	..	80	..	....	
		Upper Palni sholas.								
		Block No. 1, Perumalmalai.								
		Block No. 2, Serathankanal.								

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Madura.	No. II or Palni Hill Range—*cont.*	*Upper Palni sholas*—cont.								
		Block No. 3, Tiger shola.								
		Block No. 4, Kodaikánal.								
		Block No. 5, Gundan and Manavan.								
		Block No. 6, Parappar.								
		Block No. 7, Pannitutam.	2,316	..	..	..	2,316	..	....	
		Block No. 8, Gunden.								
		Block No. 9, Sandanam.								
		Block No. 10, Fort Hamilton.								
		Block No. 11, Mariyan.								
		Upper Palni Plantation								
		Block No. 1, Gundan shola.	..	..	* 224	..	224	..	....	
		Block No. 2, Post office.	17	..	..	..	17	..	....	
		Block No. 3, Poombarai.	6	..	..	..	6	..	....	
		Sengattampatti ..	4,480	..	..	* 2,880	1,600	..	....	
		Kadavakurichi ..	5,120	..	..	* 1,920	3,200	..	....	
		Budagudimalai ..	1,600	..	..	* 480	1,120	..	....	
		Poolamalai	..	..	800	..	800	..	G.O., 10th Feb., Nos. 91 and 91-A Rev.	
	No. III or Dindigul.	*Kanavoipatti.*								
		Block No. 1, Kuppuravalli kutta.	2,560	..	..	* 640	1,920	..	....	
		Block No. 3, Akkamakaradu.	1,600	..	..	..	1,600	..	....	
		Block No. 4, Tenkal.	3,200	..	..	* 1,280	1,920	..	....	
		Mudimalai	6,086	..	..	* 1,651	4,435	..	....	
		Aiyalur.								
		Block No. 1, Pilliyarnattam.	..	..	* 5,485	..	5,485	..	....	
		Block No. 3, Tannirkaradu.	1,920	..	..	..	1,920	..	....	
		Block No. 4, Sundamalai.	2,240	..	..	* 320	1,920	..	....	
		Sirumalai.								
		Block No. 1, Sirumalai.	25,530	..	* 70	..	25,600	..	....	* The result of measurements taken from the 1 inch taluk maps supplied only recently by the Madras Survey Department, the areas in former years having been only roughly estimated in the absence of such maps.
		Vikkaramangalam ..	10,240	..	..	* 6,451	3,789	..	....	
		Alagar Hill.								
	No. IV or Alagar Hill.	Block No. 1, Alagar Hill.	17,510	..	..	* 672	16,838	..	....	
		Perumalai	..	..	9,600	..	9,600	..	G.O., Nos. 422, 422-A, 9th July.	
		Sembulimalai ..	..	..	1,600	..	1,600	..	G.O., Nos. 311, 311-A, 5th May.	
		Mottaimalai	..	..	800	..	800	..	G.O., Nos. 91, 91-A Rev.; 10th February 1891.	
		Total ..	222,868	348·23	37,247	17,486	242,629	379·11		

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Tinnevelly.	Nangunéri	Reserve No. I ..	31,533	..	..	..	31,533	..	....	
		Teak tract	284	..	..	..	284	..	....	
		Block No. I (*a*) ..	..	..	25,999	..	25,999	..	No. 533, 2nd December.	
	Ambásamudram.	Reserve No. II ..	91,008	..	..	..	91,008	..	....	
		Mullimalai	457	..	..	..	457	..	....	
		Kaliyammankoilparai.	309	..	..	..	309	..	....	
		Koviladiparai ..	124	..	..	..	124	..	....	
		Saluparpathai ..	71	..	..	..	71	..	....	
		Block No. II (*a*), (*b*).	..	..	53,819	..	53,819	..	No. 534, 2nd December.	
		Kolundamamalai ..	..	..	1,540	..	1,540	..	No. 88, 17th February 1890.	
	Tenkási ..	Reserve No. III ..	18,010	..	..	..	18,010	..	....	
		Okaninranpathai ..	85	..	..	..	85	..	....	
		Kavulkattiparambu ..	374	..	..	..	374	..	....	
		Kottamalai	860	..	..	..	860	..	....	
		Nalankurichi ..	212	..	..	..	212	..	....	
		Chinnakadu as defined in Mr. Baber's decision on claims of Inamdar.	..	..	2,560	..	2,560	..	No. 248, 17th June.	
	Sankaranainárkoil.	Reserve No. IV ..	19,738	..	..	..	19,738	..	....	
		Chunnambuparambu.	..	..	286	..	286	..	No. 15, 20th January.	
	Srívilliputtur.	Reserve No. V ..	23,270	..	..	..	23,270	..	....	
		Unnipattimalai ..	530	..	..	..	530	..	....	
		Sappaniparambu ..	376	..	..	..	376	..	....	
		Pulpattuparambu ..	51	..	..	..	51	..	....	
		Martandamparai ..	135	..	..	..	135	..	....	
		Kottankulam ..	..	..	473	..	473	..	No. 214, 3rd June.	
	Tenkarai.	Pannamparai ..	117	..	..	..	117	..	....	
		Kaliyavúr	158	..	..	..	158	..	....	
		Kottamadakikadu ..	1,279	..	..	..	1,279	..	....	
		Kongarayakurichi ..	..	..	60	..	60	..	No. 55, 17th February.	
	Otapidaram.	Virusampatti ..	..	..	294	..	294	..	No. 133, 24th March 1890.	
		Total ..	188,981	295·28	85,031	..	274,012	428·14		
North Malabar.	Chedlet reserved forest.	Kuppadi	7,337	..	..	..	7,337	..	....	
		Kurchiyat	18,054	..	..	..	18,054	..	....	
		Rampur	18,855	..	..	..	18,855	..	....	
	Trans Beni	Nulpoya	3,613	..	..	..	3,613	..	....	
		Mavinhulla ..	12,577	..	..	..	12,577	..	....	
	Kudrakote and Padri	Begur	15,366	..	..	..	15,366	..	....	
		Adavankunnu ..	..	..	39	..	39	..	No. 22, 10th June.	
		Total ..	75,802	118·44	39	..	75,841	118·50		
South Malabar.	Nilambúr.	Amarampalam ..	468	..	..	..	468	..	....	
	Amarampalam.	Chathamborai ..	700	..	..	..	700	..	....	
		Karimpoya reserve ..	3,955	..	..	..	3,955	..	....	
		Nellikutta do. ..	1,824	..	..	..	1,824	..	....	
	Pálghat ..	Walayar do. ..	3,017	..	..	..	3,017	..	....	
		Chenalnair do. ..	15,203	..	..	..	15,203	..	....	
		Total ..	25,167	39·32	..	..	25,167	39·32		
South Canara.	Coondapoor.	No. I, Sabladi ..	208	..	..	..	208	..	....	
	Udipi ..	,, II, Ajjarkadu.	160	..	..	..	160	..	....	
		,, III, Pilarkan ..	320	..	..	..	320	..	....	
		,, VIII, Chinkramalle ..	2,560	..	..	..	2,560	..	....	
		,, VI, Manajekadu.	423	..	..	..	423	..	....	
		,, XIV, Durgamale	1,601	..	..	..	1,601	..	....	
		,, XV, Andar reserve.	..	..	22,334	..	22,334	..	G.O., No. 8-F., 15th January.	

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
South Canara—*cont.*	Mangalore.	No. VI, Chembugudde.	75	..	..	..	75	..	....	
		,, VII, Kutiyar ..	25	..	..	..	25	..	....	
		Nos. V & IV, Poitaji and Kayarpalle.	96	..	..	..	96	..	....	
		No. V, Ullal casuarina and honne plantation	57	..	..	..	57	..	....	
		,, X, Tannirbhavi.	70	..	..	..	70	..	....	
		,, XII, Hosabettu reserve.	376	..	..	..	376	..	....	
		,, XI, Todar reserve.	..	..	458	..	458	..	G.O., No. 242-F., 23rd September.	
	Upinangadi.	No. I, The Shiradi Sisla reserve.	19,200	..	..	..	19,200	..	....	
		,, IV, The Bhagimalai.	6,400	..	..	..	6,400	..	....	
		Total ..	31,571	49·33	22,792	..	54,363	84·94		
		Grand Total ..	1,864,759	2,913·68	247,655	17,591	2,094,823	3,273·16		

Abstract.

District.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
Chingleput	59,862	93·54	21,121	..	80,983	126·54
North Arcot	241,023	376·60	34,164	..	275,187	430·00
South Arcot	76,182	119·03	18,341	105	94,418	147·53
Salem	411,518	643·00	26,325	..	437,843	684·13
Trichinopoly	87,708	137·05	2,595	..	90,303	141·09
Tanjore	5,852	9·14	..	..	5,852	9·14
North Coimbatore	75,964	118·69	..	..	75,964	118·69
South Coimbatore	362,261	566·03	..	..	362,261	566·03
Madura	222,868	348·23	37,247	17,486	242,629	379·11
Tinnevelly	188,981	295·28	85,031	..	274,012	428·14
North Malabar	75,802	118·44	39	..	75,841	118·50
South Malabar	25,167	39·32	..	..	25,167	39·32
South Canara	31,571	49·33	22,792	..	54,363	84·94
Total ..	1,864,759	2,913·68	247,655	17,591	2,094,823	3,273·16

ANNUAL FORM No. 59.

Forest Department, Madras, Southern Circle.

AREA of Reserved Lands, 1890-91.

District.	Range.	Name of forest.	AREA ON 1ST APRIL 1890.		ADDED DURING THE YEAR.	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 31ST MARCH 1891.		Number and date of notification of addition or transfer	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Chingleput.	Tiruvallúr	Palavakkam	2,511	..	..	..	2,511	..	....	
		Mailapore	930	..	..	930	..	..	....	Transferred to reserved forests.
		Attantangal	268	..	..	..	268	..	....	
		Nayar	300	..	..	..	300	..	....	
		Erumaivettipalaiyam.	555	..	..	..	555	..	....	
		Kavalur	240	..	..	..	240	..	....	
		Manali	1,485	..	..	..	1,485	..	....	
		Apasamudram ..	..	..	595	..	595	..	No. 229, 4th June.	
		Kuruvithittu ..	..	..	300	..	300	..	,, 237, 4th ,,	
		Periyaoblaburam ..	..	..	66	..	66	..	,, 220, 3rd ,,	
		Elavur	..	..	179	..	179	..	,, 234, 4th ,,	
		Chinnaoblaburam ..	..	..	65	..	65	..	,, 228, 4th ,,	
		A. Siruvalipettai ..	..	..	105	..	105	..	,, 230, 4th ,,	
		B. do. ..	..	..	54	..	54	..	,, 223, 3rd ,,	
		Vengathur	..	..	312	..	312	..	,, 374, 9th Aug.	
		Budur	..	..	86	..	86	..	,, 378, 9th ,,	
		Siruvadu	..	..	373	..	373	..	,, 385, 9th ,,	
		Nemalur	..	..	980	..	980	..	,, 381, 9th ,,	
	Chingleput.	Amjur	1,514	..	..	..	1,514	..	....	
		Nemali	633	..	..	633	..	..	....	Transferred to reserved forests.
		Alapakkam, A. and B.	486	..	..	486	..	..	....	
		Tirumani	639	..	..	..	639	..	....	
		Gúdalúr	2,744	..	..	..	2,744	..	....	
		Senkundram	1,232	..	..	..	1,232	..	....	
		Kolathur *alias* Appur.	1,449	..	..	1,449	..	..	....	Transferred to reserved forests.
		Paranur	378	..	..	378	..	..	....	
		Kattankolathur ..	535	..	..	535	..	..	....	
		Kavanur	569	..	..	569	..	..	....	
		Siruvanjur	465	..	..	465	..	..	....	
		Vattambakkam ..	694	..	..	..	694	..	....	
		Vadakkupatti ..	795	..	..	795	..	..	....	Transferred to reserved forests.
		A. Kutrambakkam ..	126	..	..	126	..	..	....	
		B. do. ..	205	..	..	205	..	..	....	
		Pudipper	375	..	..	375	..	..	....	
		Mannur	570	..	..	570	..	..	....	
		Nallur	937	..	..	937	..	..	....	
		Maganyam	946	..	..	946	..	..	....	
		Kalvayi	138	..	..	138	..	..	....	
		Kolathur	1,909	..	..	1,909	..	..	....	
		Kayar	642	..	..	642	..	..	....	
		Taiyur	1,084	..	..	1,084	..	..	....	
		Mambakkam	766	..	..	..	766	..	....	
		Sonallur	1,107	..	..	1,107	..	..	....	
		Unamanjeri	752	..	..	752	..	..	....	750 transferred to reserved forests and 2 excluded at settlement.
		Kumili	683	..	* 7	..	690	..	....	* Added at settlement.
		Kattur	2,894	..	* 66	..	2,960	..	....	
		Alathur	488	..	..	488	..	..	....	Transferred to reserved forests.
		Illalur	702	..	..	702	..	..	....	692 transferred to reserved forests and 10 excluded at settlement.
		A. Sirukundram ..	872	..	..	† 3	869	..	....	† Excluded at settlement.
		B. do. ..	378	..	..	..	378	..	....	
		Hanumanthaputheri. .	284	..	‡ 2	286	..	..	....	‡ Added at settlement. Transferred to reserved forests.
		Melamaiyyur ..	..	..	49	..	49	..	No. 255, 16th June.	
	Saidápet..	Pulikkoradu	176	..	..	176	..	..	....	Transferred to reserved forests.
		Tamburam	262	..	..	262	..	..	....	
		Kadapperi	229	..	..	229	..	..	....	227 transferred to reserved forests and 2 excluded at settlement.
		Selaiyur	492	..	§ 6	498	..	..	....	§ Added at settlement. Transferred to reserved forests.

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Chingleput—*cont.*	Saidápet—*cont.*	Maduraipakkam ..	359	..	..	359	..	..	....	351 transferred to reserved forests and 8 excluded at settlement.
		Nanmangalam ..	333	..	..	333	..	..	....	328 transferred to reserved forests and 5 excluded at settlement.
		Madambakkam ..	567	..	..	..	567	..	....	
		Erumaiyur	197	..	..	197	..	..	....	192 transferred to reserved forests and 5 excluded at settlement.
		Arsankalani	187	..	..	2	185	..	....	Excluded at settlement.
		A. Perumbakkam ..	639	..	..	639	..	..	....	636 transferred to reserved forests and 3 excluded at settlement.
		B. do. ..	117	..	..	117	..	..	....	Transferred to reserved forests.
		Meyyur	534	..	..	534	..	..	....	
		Kovilpidagai ..	377	..	..	..	377	..	....	
		Sikkarayapuram ..	100	..	..	100	..	..	....	93 transferred to reserved forests and 7 excluded at settlement.
		Kuttambakkam ..	300	..	..	300	..	..	....	Transferred to reserved forests
		Mittanemalai ..	262	..	* 5	267	..	..	....	* Added at settlement. Transferred to reserved forests.
		Tirumalavayal ..	389	..	..	389	..	..	....	386 transferred to reserved forests and 3 excluded at settlement.
		Nandambakkam ..	262	..	..	262	..	..	....	259 transferred to reserved forests and 3 excluded at settlement.
	Chingleput.	Tirusulam	270	..	..	..	270	.	....	
		Achcharapakkam ..	864	..	..	..	864	..	....	
		Lattur	1,011	..	..	..	1,011	..	....	
		Nedumaram	198	..	..	..	198	..	....	
		Venmani	238	..	..	..	238	..	....	
		Madayambakkam ..	241	..	..	..	241	..	....	
		Sattamai	135	..	..	..	135	..	....	
		Kattugudalur ..	4,273	..	..	..	4,273	..	....	
		Rajupalliem	806	..	..	..	806	..	....	
		Kurumbarai	250	..	..	..	250	..	....	
		Endathur	168	..	..	..	168	..	....	
		Tandalam	1,428	..	..	..	1,428	..	....	
		Sirunallur	503	..	..	..	503	..	....	
		Kannimangalam ..	142	..	..	..	142	..	....	
		Nariamputtur ..	326	..	..	..	326	..	....	
		Karukoli	600	..	..	..	600	..	....	
		Kadalamangalam ..	731	..	..	..	731	..	....	
		Vadatanur	1,078	..	..	..	1,078	..	....	
		Vinayaganallur ..	127	..	..	..	127	..	....	
		Kunamkolattur ..	106	..	..	..	106	..	....	
		Bopanallur	538	..	..	..	538	..	....	
		Muthukadu	86	..	..	..	86	..	....	
		Total ..	54,181	84·66	3,250	21,174	36,257	56·65		
North Arcot	Chittoor.	Veerasettipalle ..	7,587	..	..	..	7,587	..	....	
		Chittapara	4,850	..	..	..	4,850	..	....	
		Basavapalle	2,027	..	..	..	2,027	..	....	
		Mahimandalam ..	2,522	..	..	..	2,522	..	....	
		Irala	16,130	..	..	..	16,130	..	....	
		Santapet	2,276	..	..	..	2,276	..	....	
		Chittoor	360	..	..	..	360	..	....	
		Kinatipalle	1,417	..	..	1,417	..	..	....	Transferred to reserved forests.
		Chillapalli	1,296	..	..	1,296	..	..	....	
		Penamur	6,400	..	..	6,400	..	..	....	

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
North Arcot—*cont.*	Chandragiri.	Mamandúr extension..	8,000	..	..	8,000	..	..	....	Transferred to reserved forests.
		Tirupati hill	16,000	..	..	16,000	..	..	....	
		Nagaputla	8,320	..	..	..	8,320	..	....	
		Mungilpattu	23,040	..	..	..	23,040	..	..	
	Palmanér.	Charugal	19,200	..	..	..	19,200	..	....	
		Pedunaig drug ..	12,800	..	..	..	12,800	..	....	
	Gudiyatam.	Panamadangi ..	9,600	..	..	..	9,600	..	....	
		Paradurami extension.	2,500	..	..	..	2,500	..	....	
		Sinnagunta	6,400	..	..	..	6,400	..	....	
		Naickanari extension.	1,280	..	..	..	1,280	..	....	
		Mordana do. ..	9,600	..	..	..	9,600	..	....	
		Gundalapalli	8,420	..	..	..	8,420	..	....	
		Pallalakuppam ..	6,212	..	..	..	6,212	..	....	
		Karapattu	8,388	..	..	..	8,388	..	....	
	Vellore ..	Ambúr extension ..	25,600	..	..	..	25,600	..	....	
		Arasampet	18,000	..	..	..	18,000	..	....	
		Athiyur	* 4,880	..	..	..	4,880	..	No. 388, 26th August.	*Portions of Javadi hill block, Arasampet Naikineri.
		Vellakal	* 5,280	..	..	..	5,280	..	No. 390, 26th August.	
	Pólúr ..	Kelúr	3,537	..	..	..	3,537	..	....	
		Alliyalamangalam ..	10,062	..	..	..	10,062	..	....	
		Kapalur	1,267	..	..	..	1,267	..	....	
		Malayalam	12,800	..	..	..	12,800	..	....	
		Santavasal	8,500	..	..	..	8,500	..	....	
		Mulakadu	17,000	..	..	..	17,000	..	....	
	Arcot ..	Sátúr	1,048	..	..	..	1,048	..	....	
		Enadivadi	1,567	..	..	..	1,567	..	....	
		Thandappatangal ..	1,112	..	..	..	1,112	..	....	
		Shólavaram	1,232	..	..	..	1,232	..	....	
	Wallajah.	Amúr	6,020	..	..	..	6,020	..	....	
		Kolatúr	1,779	..	..	..	1,779	..	....	
		Minnel	1,378	..	..	..	1,378	..	....	
		Banavaram	1,051	..	..	1,051	..	..	....	Transferred to reserved forests.
	Wandiwash.	Vengunam	1,288	..	..	..	1,288	..	....	
		Ponnur	939	..	..	..	939	..	....	
		Badur	873	..	..	..	873	..	....	
		Mambedu	720	..	..	..	720	..	....	
		Kodiyalam	125	..	..	..	125	..	....	
		Nedungunam.. ..	1,797	..	..	..	1,797	..	....	
		Vishamangalam ..	1,148	..	..	..	1,148	..	....	
		Nedungal	3,645	..	..	..	3,645	..	....	
		Lands reserved under Rule 2, section 26 of the Forest Act.								
	Vellore ..	Javadi hill block. Arasampet and Naickaneri.	†10,240	..	..	..	10,240	..	....	†The difference as compared with last year's closing balance is due to portions appearing elsewhere designated Attiyur and Vellakal blocks.
	Chandragiri.	Balapalle	40,640	..	..	..	40,640	..	....	
	Wallajah.	Vadantangal	64	..	..	..	64	..	....	
		Balakrishnapuram ..	63	..	..	..	63	..	....	
		Kattupakkam ..	145	..	..	..	145	..	....	
		Ayal	16	..	..	..	16	..	....	
		Banavaram	35	..	..	..	35	..	....	
		Head Assistant Collector's office compound, Arkónam.	4	..	..	..	4	..	....	
		Total ..	368,480	575·75	..	34,164	334,316	522·37		
South Arcot.	No. I Range, Tiruvannámalai.	Valasamalai	12,738	..	..	..	12,738	..		
		Tenmalai	50,428	..	..	..	50,428	..		
		Pelamaradur	9,148	..	..	..	9,148	..		
		Nallapattu	6,748	..	..	..	6,748	..		
		Paramanandel ..	..	..	1,800	..	1,800	..	No. 540, 9th December.	
		Ravandavadi ..	..	..	13,333	..	13,333	..		
		Ponniar	..	..	50,000	..	50,000	..		
		Nattampalle	..	..	7,333	..	7,333	..		
		Radapuram	..	..	7,000	..	7,000	..		
		Kannamadai	..	..	7,000	..	7,000	..		
		Peradikuppam ..	729	..	..	729	..	..		Transferred to reserved forests.
	No. II Range, Tindivanam.	Padipallam	4,394	..	..	..	4,394	..		
		Pakkam	14,894	..	..	..	14,894	..		
		Kurumpuram, 1st bit.	556	..	..	..	556	..		
		Panchalam	1,190	..	..	1,190	..	..		1,120 transferred to reserved forests and 70 cut off at settlement.
		Akkur	1,350	..	..	1,350	..	..		Transferred to reserved forests.
		Naduvandur	2,800	..	..	..	2,800	..		

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
South Arcot—*cont.*	No. III Range, Villupuram.	Panampattu	851	..	..	..	851	..	....	
		Valudareddi	384	..	..	..	384	..	....	
		Kappiyampiliyur ..	812	..	..	..	812	..	....	
		Gangarampaliyam ..	512	..	..	..	512	..	....	
		Vakkur	384	..	..	384	..	..	....	Transferred to reserved forests.
		Vikkaravandi.. ..	256	..	..	256	..	..	....	Transferred to reserved forests.
		Melkondai	480	..	..	..	480	..	....	
		Settanur, 1st bit ..	204	..	..	204	..	..	....	Transferred to reserved forests.
		Narasinganur ..	428	..	..	428	..	..	....	
		Kundalapiliyur ..	940	..	..	940	..	..	....	
		Karanai	128	..	..	128	..	..	....	
		Sattanur, 2nd bit ..	320	..	..	..	320	..	....	
		Ariyálúr	1,036	..	..	1,036	..	..	....	Transferred to reserved forests.
		Turinjikadu	853	..	..	..	853	..	....	
		Pulanjimalai	853	..	..	..	853	..	....	
		Tandavasamudram ..	2,112	..	..	..	2,112	..	....	
	No. IV Range, Cuddalore.	Ramapuram	1,868	..	..	..	1,868	..	....	
		Vellakarai	1,568	..	..	1,568	..	..	....	Transferred to reserved forests.
		Valudalampatti ..	908	..	..	908	..	..	....	
		Sillambanadampatti ..	780	..	..	..	780	..	....	
		Vegakollai	480	..	..	480	..	..	....	Transferred to reserved forests.
		Vadakottu	3,084	..	..	3,084	..	..	....	
		Veludiyampatti ..	1,536	..	..	1,536	..	..	....	
		Peramathur	1,036	..	..	..	1,036	..	....	
		Kanjiruppu, 1st bit ..	2,956	..	..	2,956	..	..	....	Transferred to reserved forests.
		Do. 2nd bit ..	2,519	..	..	..	2,519	..	....	
		Velankuppam ..	1,094	..	..	1,094	..	..	....	Transferred to reserved forests.
		Talankadu	217	..	..	..	217	..	....	
		Fort St. David ..	25	..	* 19	..	44	..	....	* By actual survey.
		Shonankuppam ..	140	..	..	140	..	..	....	Transferred to reserved forests.
		Doni Durai	192	..	..	..	192	..	....	
		Nochikadu	640	..	..	..	640	..	....	
		Periyakuppam ..	1,683	..	..	..	1,683	..	....	
	No. IV Range, Chidambaram.	Periyapattu	..	..	1,145	..	1,145	..	....	
		Killai	..	..	1,220	..	1,220	..	No. 542, 9th December.	
		Pichavaram	..	..	2,515	..	2,515	..		
		Wállajáh	..	..	2,820	..	2,820	..		
		Nayanur	2,034	..	† 270	..	2,304	..	....	† By recomputation.
		Adukkam	2,169	..	..	‡ 169	2,000	..	....	‡ Excluded at settlement.
		Attipakam	4,800	..	..	..	4,800	..	....	
		Samimalai, 1st bit ..	4,641	..	..	..	4,641	..	....	
		Do, 2nd bit ..	5,580	..	..	..	5,580	..	....	
		Nattanur, 1st bit ..	4,761	..	† 29	‡ 290	4,500	..	....	
	No. V Range, Tirukoilúr.	Do 2nd bit ..	4,000	..	..	† 29	3,971	..	....	
		Sidevi	4,243	..	..	..	4,243	..	....	
		Alwarmalai	8,950	..	..	..	8,950	..	....	
		Sirupakam	1,228	..	..	..	1,228	..	....	
		Edakal	3,742	..	..	† 119	3,623	..	....	
		Kutadi	1,766	..	..	‡ 66	1,700	..	....	
		Pandur	1,000	..	† 119	‡ 164	955	..	....	
		Velur	1,804	..	..	‡ 134	1,670	..	....	
		Perichanur	928	..	..	..	928	..	....	
	No. VI Range, Kallakurchi.	Takarai	..	..	15,400	..	15,400	..	No. 224, 10th June.	
		Kanai	..	..	2,222	..	2,222	..		
		Pavunjipattu	..	..	4,500	..	4,500	..		
		Rangapanur	..	..	2,560	..	2,560	..		
		Mallapuram	..	..	1,025	..	1,025	..		
		Kanankadu	..	..	3,520	..	3,520	..		
		Kottalammalai ..	..	..	2,880	..	2,880	..		
		Kristnapuram ..	..	..	6,150	..	6,150	..		
		Nangur	..	..	1,630	..	1,630	..		
		Veppur	..	..	3,970	..	3,970	..		
	No. VII Range, Vriddhachalam.	Kottapur	..	..	4,100	..	4,100	..		
		Narasinganur	..	..	850	..	850	..		
		Karmanguḍi	..	..	1,170	..	1,170	..	No. 541, 9th December.	
		Parur	..	..	3,000	..	3,000	..		
		Sanakottai	..	..	6,270	..	6,270	..		
		Ammeri	..	..	1,350	..	1,350	..		
		Kuppanattam	..	..	850	..	850	..		
		Kattumayilur	..	..	1,600	..	1,600	..		

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		Lands reserved under Rule 2, section 26 of the Forest Act.								
South Arcot—*cont.*	No. I Range, Tiruvannámalai.	Melchengam	2,000	..	..	..	2,000	..	....	
		Pinjur	8,640	..	..	..	8,640	..	....	
		Munnurmangalam ..	4,160	..	..	..	4,160	..	....	
		Eraiyurmalai ..	7,125	..	..	..	7,125	..	....	
		Uchimalai	3,500	..	..	..	3,500	..	....	
		Pumalai	3,200	..	..	..	3,200	..	....	
		Rayandapuram ..	7,000	..	..	..	7,000	..	....	
		Sennyampettai ..	3,720	..	..	..	3,720	..	....	
		Kanji	3,040	..	..	..	3,040	..	....	
		Gengampattu ..	1,920	..	..	..	1,920	..	....	
		Sorakolattur	7,600	..	..	..	7,600	..	....	
		Devanandal	2,000	..	..	..	2,000	..	....	
		Kodambai	2,000	..	..	..	2,000	..	....	
		Tachampattu ..	2,300	..	..	..	2,300	..	....	
	No. IV Range, Cuddalore.	Siruvattur	212	..	..	..	212	..	....	
		Ranganadapuram ..	620	..	..	..	620	..	....	
		Puvamkuppam ..	640	..	..	..	640	..	....	
		Adivarahanallur ..	1,860	..	..	..	1,860	..	....	
	No. IV Range, Chidambaram.	Nisingan	800	..	..	..	800	..	....	
		Rampakkam	635	..	..	..	635	..	....	
		Kondapuram	972	..	..	..	972	..	....	
		Kolakkudi	659	..	..	..	659	..	....	
	No. V Range, Tirukoilúr.	Velandai	1,200	..	..	..	1,200	..	....	
		Sengamedu	755	..	..	..	755	..	....	
		Sittamur	1,510	..	..	..	1,510	..	....	
		Odiattur	1,696	..	..	..	1,696	..	....	
		Emappur	340	..	..	..	340	..	....	
		Mambakkam ..	480	..	..	..	480	..	....	
		Elandurai	307	..	..	..	307	..	....	
		Tiruvannanallur ..	240	..	..	..	240	..	....	
		Kalamarudur	1,350	..	..	..	1,350	..	....	
		Kunjaram	5,090	..	..	..	5,090	..	....	
		Pachapalaiyam ..	1,600	..	..	..	1,600	..	....	
		Kallamedu	1,235	..	..	..	1,235	..	....	
		Rishivendiem ..	..	..	5,200	..	5,200	..	Bd.'s Procgs., Forest No. 196 of 14th April.	
	No. VI Range, Kallakurchi.	Sittalur	..	..	1,000	..	1,000	..		
		Porasakurchi ..	..	..	950	..	950	..		
		Varanjaram	..	..	900	..	900	..		
		Magarur	..	..	1,440	..	1,440	..		
	No. VII Range, Vriddhachalam.	Periyanisalur ..	720	..	..	..	720	..	....	
		Ivadagudi	650	..	..	..	650	..	....	
		Sattiyam	416	..	..	..	416	..	....	
		Vriddháchalam tank.	192	..	..	..	192	..	....	
		Kannapuram ..	1,800	..	..	..	1,800	..	....	
		Narimanam	640	..	..	..	640	..	....	
		Periyakurichi ..	360	..	..	..	360	..	....	
		Velankulam	1,390	..	..	..	1,390	..	....	
		Kattiyanallur ..	960	..	..	..	960	..	....	
		Total ..	275,434	430·37	167,140	19,382	423,192	661·24		
Salem ..	Atúr ..	Pattimedu	3,046	..	..	..	3,046	..	....	
		Nagalur	6,138	..	..	..	6,138	..	....	
		Thumbal	3,680	..	..	..	3,680	..	....	
		Mannur	4,000	..	..	..	4,000	..	....	
		Pattimedu extension.	1,200	..	..	..	1,200	..	....	
		Thumbal extension ..	4,800	..	..	..	4,800	..	....	
		Iadayagounden slope.	..	..	11,220	..	11,220	..	No. 162, 15th April.	
		Gangavalle	..	..	7,040	..	7,040	..		
		Varagur extension ..	..	..	500	..	500	..		
	Salem ..	Pillapadi	4,992	..	..	..	4,992	..	....	
		Mallapuram ghât ..	2,285	..	..	2,285	..	..	....	Transferred to reserved forests.
		Mallapuram ghât extension	640	..	..	640	..	..	....	Transferred to reserved forests.
		Kurumbapatti extension	10,000	..	..	..	10,000	..	....	
		Vanavasi	9,000	..	..	..	9,000	..	....	
		Ramaswami malai ..	3,000	..	..	..	3,000	..	....	
		Puliyankad	1,000	..	..	1,000	..	..	....	Transferred to reserved forests.
		Arasankad	2,500	..	..	..	2,500	..	....	
		Kaputu	3,500	..	..	..	3,500	..	....	
		Mattikottai	3,500	..	..	3,500	..	..	....	Transferred to reserved forests.

Area of Reserved Lands, 1890–91—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Salem—*cont.*	Salem—*cont.*	Pungamaduvu ..	2,500	..	..	2,500	..	..	....	Transferred to reserved forests.
		Pudupatti	7,500	..	..	..	7,500	..	....	
		Kanjamalai	4,500	..	..	4,500	..	..	....	Transferred to reserved forests.
		Nagaramalai ..	1,280	..	..	..	1,280	..	....	
		Mary Land	400	..	..	400	..	..	....	Transferred to reserved forests.
		Saniyasimalai ..	600	..	..	..	600	..	....	
		Yelattur	2,000	..	..	..	2,000	..	No. 162, 15th April..	
		Kudimaduvu ..	4,307	..	..	..	4,307	..		
		Ammapalayam ..	9,216	..	..	..	9,216	..	....	
		Konramalai extension.	4,000	..	..	..	4,000	..	....	
		Mukanur	8,000	..	..	..	8,000	..	....	
		Thombakal extension.	..	..	3,840	..	3,840	..		
		Nochikuttai ..	7,917	..	..	..	7,917	..		
		Kalnad	4,320	..	..	..	4,320	..	No. 161, 15th April.	
		Chitteri extension ..	..	..	2,880	..	2,880	..		
		Veppambatti ..	8,640	..	..	..	8,640	..		
		Thirthamalai ..	11,046	..	..	..	11,046	..		
	Tirupatúr.	Vellakuttai ..	1,152	..	..	..	1,152	..	....	
	Uttenkarai and Tirupatúr.	Govindapuram ..	3,104	..	..	* 404	2,700	..	No. 161, 15th April.	* Due to rectification.
	Tirupatúr & Krishnagiri.	Nandibanda	2,500	..	..	..	2,500	..	....	
	Hosúr ..	Galigattam	..	..	6,080	..	6,080	..	No. 158, 15th April.	
		Kestur extension ..	..	..	3,600	..	3,600	..		
		Thalli extension ..	..	..	4,320	..	4,320	..		
	Dharmapuri.	Kesaraguli	6,400	..	..	..	6,400	..	....	
		Picklymalai	6,400	..	..	..	6,400	..	....	
		Masakal	9,600	..	..	..	9,600	..	....	
		Bianurmalai	11,500	..	..	11,500	..	..	....	Transferred to reserved forests.
		Bathanavadi	27,000	..	..	..	27,000	..	....	
		Perumbalai	12,000	..	..	..	12,000	..	....	
		Kelapambadi ..	9,500	..	..	..	9,500	..	....	
		Thoppur	7,000	..	..	..	7,000	..	....	
		Maharajgudai ..	10,304	..	..	..	10,304	..	....	
		Neralkota	7,040	..	..	..	7,040	..	....	
	Krishnagiri.	Maharajgudai extension.	..	..	2,560	..	2,560	..	No. 489, 11th Nov.	
		Varatanapalli ..	..	..	2,216	..	2,216	..	No. 158, 15th April.	
		Thattakal	..	..	857	..	857	..		
	Tiruchengód.	Suriyamalai	5,000	..	..	..	5,000	..	....	
		Lands reserved under Rule 2, section 26 of the Forest Act.								
	Salem ..	Velampatti	3,500	..	..	..	3,500	..	....	
		Kurichi	2,300	..	..	..	2,300	..	....	
		Mallur	5,000	..	..	..	5,000	..	....	
	Uttenkarai.	Karungal	4,320	..	..	..	4,320	..	....	
		Uttenkarai, new ..	3,200	..	..	..	3,200	..	....	
		Wonnagiri	2,944	..	..	..	2,944	..	....	
		Kallavi	4,160	..	..	..	4,160	..	....	
		Poyyapatti	3,488	..	..	..	3,488	..	....	
		Morappur	4,000	..	..	..	4,000	..	....	
		Harur, new	1,901	..	..	..	1,901	..	....	
		Kaladipatti	2,912	..	..	..	2,912	..	....	
		Thenkaraikotta ..	2,368	..	..	..	2,368	..	....	
		Kouramalai	8,512	..	..	..	8,512	..	....	
	Tirupatúr.	Kothanur	7,257	..	..	..	7,257	..	....	
		Garagamandi ..	1,280	..	..	..	1,280	..	....	
		Madagathur	3,200	..	..	..	3,200	..	....	
		Andiappanur ..	4,704	..	..	..	4,704	..	....	
	Hosúr ..	Hulibanda	7,360	..	..	..	7,360	..	....	
		Pani	5,856	..	..	..	5,856	..	....	
		Kundukotta	4,768	..	..	..	4,768	..	....	
		Sivanhalli	4,992	..	..	..	4,992	..	....	
		Total ..	346,029	540·67	45,113	26,729	364,413	569·40		
Trichinopoly.	Trichinopoly.	Ettarai	483	..	..	..	483	..	....	
		Adavatur, No. I ..	370	..	..	..	370	..	....	
		Do. ,, II ..	331	..	..	..	331	..	....	
		Velur	382	..	..	..	382	..	....	
		Kotrapatti	211	..	..	..	211	..	....	
		Natarajapuram ..	109	..	..	..	109	..	....	
		Alandur	149	..	..	..	149	..	....	
		Adavatur	144	..	..	..	144	..	....	
		Punganúr	281	..	..	..	281	..	....	

Area of Reserved Lands, 1890–91—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Trichinopoly—*cont.*	Kulitalai.	Shemmalai, No. II	1,593	..	..	1,593	..	..	....	Transferred to reserved forests.
		Marudur	180	..	..	180	..	..	....	
		Mayanur	50	..	..	50	..	..	....	
		Pudúr	143	..	..	..	143	..	....	
		Sekkonam	119	..	..	..	119	..	....	
		Mahadanapuram	191	..	..	..	191	..	....	
		Pillapalaiyam	11	..	..	..	11	..	....	
		Vengampatti	103	..	..	..	103	..	....	
		Panjantangi hill valley.	262	..	..	..	262	..	....	
		Segam karadu	714	..	..	714	..	..	....	Transferred to reserved forests.
		Karuppar Reddipatti hill.	4,112	..	..	..	4,112	..	....	
	Musiri	Omandur	321	..	..	..	321	..	....	
		Tolayanatham and Kotharapatti.	333	..	..	..	333	..	....	
		Tirutalaiyur	125	..	..	..	125	..	....	
		Yedumalai	959	..	..	..	959	..	....	
		Vellakalpatti	1,224	..	..	..	1,224	..	....	
		Pulivalam	522	..	..	..	522	..	....	
		Mavalipatti	1,010	..	..	..	1,010	..	....	
		Visalatchiammal samudram.	138	..	..	..	138	..	....	
		Manmalai, Kanjurmalai and Uduvampattimalai.	3,000	..	..	..	3,000	..	....	
		Kanapadi vunnad	10,000	..	..	..	10,000	..	....	
	Perambalúr.	Kunnam	195	..	..	..	195	..	....	
		Kottavasel	167	..	..	..	167	..	....	
		Karaipadi	221	..	..	..	221	..	....	
		Valaiyur Plateau	3,000	..	..	..	3,000	..	....	
		Do. slope	3,480	..	..	..	3,480	..	....	
		Udumbiyam	500	..	..	..	500	..	....	
		Periyavenmani	138	..	..	..	138	..	....	
		Tondapadi	276	..	..	..	276	..	....	
		Anukur	487	..	..	..	487	..	....	
		Malvoy	264	..	..	..	264	..	....	
		Nossiyam	152	..	..	..	152	..	....	
		Puduvettakudi	113	..	..	..	113	..	....	
		Kallakudi	123	..	..	..	123	..	....	
		Attiyur	98	..	..	..	98	..	....	
		Veppantatti	213	..	..	..	213	..	....	
		Pasumbalur Therkukarai	149	..	..	..	149	..	....	
		Pasumbalur Vadakarai	240	..	..	..	240	..	....	
		Nunne	175	..	..	..	175	..	....	
		Kolattur	116	..	..	..	116	..	....	
		Ogalur	190	..	..	..	190	..	....	
		Sirukudal	166	..	..	..	166	..	....	
		Saturbakam	352	..	..	..	352	..	....	
		Kelapuliyur	229	..	..	..	229	..	....	
		Neikuppei, No. I	154	..	..	..	154	..	....	
		Do. ,, II	90	..	..	..	90	..	....	
		Yesanai	113	..	..	..	113	..	....	
		Peramattur	658	..	..	..	658	..	....	
		Mavalingai	260	..	..	..	260	..	....	
		Pulambadi, No. I	222	..	..	..	222	..	....	
		Do. ,, II	645	..	..	..	645	..	....	
		Do. ,, III	133	..	..	..	133	..	....	
		Visvakudi	150	..	..	..	150	..	....	
		Mattavarai	283	..	..	..	283	..	....	
		Ariyur, No. I	290	..	..	..	290	..	....	
		Do. ,, II	140	..	..	..	140	..	....	
		Ladapuram	103	..	..	..	103	..	....	
		Sittalai	404	..	..	..	404	..	....	
		Sinnavadakarai	268	..	..	..	268	..	....	
		Nuttapur	175	..	..	..	175	..	....	
		Makurumbalur	269	..	..	..	269	..	....	
		Sattanavadi	214	..	..	..	214	..	....	
		Vengalam	361	..	..	..	361	..	....	
		Kalpadi	300	..	..	..	300	..	....	
		Venparur	1,024	..	..	..	1,024	..	....	
		Paravai	150	..	..	..	150	..	....	
		Nerkunam	1,253	..	..	..	1,253	..	....	
		Tevaiyur	253	..	..	..	253	..	....	
		Mettupálaiyam	539	..	..	..	539	..	....	
		Elambalur	214	..	..	..	214	..	....	

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Trichinopoly—*cont.*	Perambalúr—*cont.*	Maravattur	261	..	..	..	261	..	....	
		Kanakasittur	310	..	..	..	310	..	....	
		Peraiyur	856	..	..	..	856	..	....	
		Vennarampundi ..	214	..	..	..	214	..	....	
		Tiruvalandurai ..	197	..	..	..	197	..	....	
		Birmadesam	273	..	..	..	273	..	....	
		Kurumbalur	366	..	..	..	366	..	....	
		Numbakurichi, No. I.	328	..	..	..	328	..	....	
		Do. ,, II.	165	..	..	..	165	..	....	
		Kilarasur	207	..	..	..	207	..	....	
		Kelakkarai	119	..	..	..	119	..	....	
		Yeraiyur and Naduvasal.	562	..	..	..	562	..	....	
		Naduvasal	176	..	..	..	176	..	....	
		Sirumattur	499	..	..	..	499	..	....	
	Udayárpálaiyam.	Jayankondacholapuram, No. I.	150	..	..	..	150	..	....	
		Jayankonda Sholapuram, No. II.	300	..	..	..	300	..	....	
		Vanavanallur	200	..	..	..	200	..	....	
		Kodukkur	100	..	..	..	100	..	....	
		Kanguli	800	..	..	..	800	..	....	
		Ayyur	1,400	..	..	..	1,400	..	....	
		Tirukonam	650	..	..	..	650	..	....	
		Pasikulam	100	..	..	..	100	..	....	
		Sittodeyar	54	..	..	..	54	..	....	
		Kulamur	200	..	..	..	200	..	....	
		Periyakurichi ..	150	..	..	..	150	..	....	
		Sattambadi	1,000	..	..	..	1,000	..	....	
		Alavai	300	..	..	..	300	..	....	
		Ambapur	200	..	..	..	200	..	....	
		Ulliakudi	200	..	..	..	200	..	....	
		Sundreswarapuram ..	150	..	..	..	150	..	....	
		Periyavalaiyam ..	1,000	..	..	..	1,000	..	....	
		Vettiyarvettu, Nos. I and II.	650	..	..	..	650	..	....	
		Kovilur	700	..	..	..	700	..	....	
		Mudukulam	1,200	..	..	..	1,200	..	....	
		Velangudi	900	..	..	..	900	..	....	
		Kolámanikkam ..	242	..	..	..	242	..	....	
		Aramanaikkurichi ..	91	..	..	..	91	..	....	
		Karaipakkam ..	83	..	..	..	83	..	....	
		Tiruvenganur, Nos. I to V.	136	..	..	..	136	..	....	
		Varappanakkurichi, Nos. I to VI.	190	..	..	..	190	..	....	
		Sattambadi, Nos. I to XI.	179	..	..	..	179	..	....	
		Sripurandan, Nos. I and II.	434	..	..	..	434	..	....	
		Valakkurichi, Nos. I to III.	48	..	..	48	..	..	....	Transferred to reserved forests.
		Annagarampettai, Nos. I to V.	58	..	..	..	58	..	....	
		Tennamanallur ..	10	..	..	10	..	..	....	Transferred to reserved forests.
		Total ..	63,687	99·51	..	2,595	61,092	95·45	....	
Tanjore.	Northern Range.	Vettangudi	1,900	..	..	..	1,900	..	....	
		Elantope	18	..	..	..	18	..	....	
		Talanthondi	100	..	..	..	100	..	....	
		Karpalam	54	..	..	..	54	..	....	
		Kadakkavinayaganellur.	90	..	..	..	90	..	....	
		Ambanar, No. I ..	134	..	..	..	134	..	....	
		Do. ,, II ..	122	..	..	..	122	..	....	
		Kaliyappanallur ..	20	..	..	..	20	..	....	
	Southern Range.	Kodiyakadu Point Calimere.	4,355	..	..	..	4,355	..	....	
		Edangankottai ..	200	..	..	..	200	..	....	
		Perumagalur ..	13	..	..	..	13	..	....	
		Kolakudi	13	..	..	..	13	..	....	
		Muthukurichi ..	10	..	..	..	10	..	....	
		Anaikadu	10	..	..	..	10	..	....	
		Vattagudi	10	..	..	..	10	..	....	
		Alattur	10	..	..	..	10	..	....	
		Kannugudi, No. I ..	10	..	..	..	10	..	....	
		Do. ,, II..	266	..	..	..	266	..		

Area of Reserved Lands, 1890–91—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Tanjore —*cont.*	Southern Range —*cont.*	Pambathukadu ..	203	..	..	..	203	..	....	
		Kathuvani Vakkanathi reserve.	53	..	..	..	53	..	....	
		Nannilam	2	..	..	..	2	..	....	
		Melakadu	331	..	..	..	331	..	....	
		Vendayampatti ..	231	..	..	..	231	..	....	
		Kambayanatham ..	65	..	..	..	65	..	....	
		Kurungulam, No. I..	100	..	..	..	100	..	....	
		Do. „ II..	141	..	..	..	141	..	....	
		Tholaraputti	538	..	..	..	538	..	....	
		Pinganmodu	116	..	..	..	116	..	....	
		Vaduvur No. I ..	57	..	..	..	57	..	....	
		Do. „ II ..	94	..	..	..	94	..	....	
		Do. „ III ..	38	..	..	..	38	..	....	
		Do. „ IV ..	133	..	..	..	133	..	....	
		Do. „ V ..	124	..	..	..	124	..	....	
		Do. „ VI ..	146	..	..	..	146	..	....	
		Do. „ VII ..	212	..	..	..	212	..	....	
		Sorapettai	70	..	..	..	70	..	....	
		Ullikottai	130	..	..	..	130	..	....	
		Total ..	10,119	15·81	..	..	10,119	15·81		
North Coimbatore	Satyamangalam.	Talamalai	121,600	..	..	..	121,600	..	....	
		Gutialatur	179,200	..	..	..	179,200	..	....	
	Kollegál..	Chickialur	53,760	..	..	..	53,760	..	....	
		Doddasempagai ..	65,920	..	..	..	65,920	..	....	
		Yedaralli and Ponnachy.	476,160	..	..	..	* 476,160	..	Bd.'s Pros., 17th January, Forest No. 29. G.O., No. 96, 12th February.	* Only 293,120 acres notified under section 4.
	Bhavâni..	Palamalai	28,160	..	..	..	28,160	..		
		Burgur north and Burgur south.	215,040	..	..	..	215,040	..		
	Erode ..	....	27,927	..	..	..	27,927	..	....	
	Karúr ..	....	3,549	..	..	..	3,549	..	....	
		Total ..	1,171,316	1,830·18	..	..	1,171,316	1830·18		
South Coimbatore	Palladam.	Alatur	237	..	..	..	237	..	....	
		Ammapalayam ..	119	..	..	..	119	..	....	
		Arasur	94	..	..	..	94	..	....	
		Asanellipalayam ..	160	..	..	..	160	..	....	
		Avanáshi	55	..	..	..	55	..	....	
		Ichipatti	639	..	..	..	639	..	....	
		Iduvai	94	..	..	..	94	..	....	
		Ittivirampalayam ..	581	..	..	..	581	..	....	
		Kadirampalayam ..	185	..	..	..	185	..	....	
		Kaduvettipalayam ..	80	..	..	..	80	..	....	
		Kalipalayam	123	..	..	..	123	..	....	
		Kandampalayam ..	92	..	..	..	92	..	....	
		Kaniyampalayam ..	156	..	..	..	156	..	....	
		Kaniyur	813	..	..	..	813	..	....	
		Karadibavi	50	..	..	..	50	..	....	
		Karaipudur	92	..	..	..	92	..	....	
		Karavalur	522	..	..	..	522	..	....	
		Kurumbapalayam ..	299	..	..	..	299	..	....	
		Karumattampatti ..	292	..	..	..	292	..	....	
		Kodangipalayam ..	121	..	..	..	121	..	....	
		Kuppandapalayam ..	69	..	..	..	69	..	....	
		Kuttagam	582	..	..	..	582	..	....	
		Mangarasuvalaiyampalayam.	271	..	..	..	271	..	....	
		Moparipalayam ..	163	..	..	..	163	..	....	
		Narapapuram ..	556	..	..	..	556	..	....	
		Narayampalli ..	51	..	..	..	51	..	....	
		Nilambúr	113	..	..	..	113	..	....	
		Papakulam	103	..	..	..	103	..	....	
		Paruvai	76	..	..	..	76	..	....	
		Pattampalaiyam ..	79	..	..	..	79	..	....	
		Perumanallur ..	159	..	..	..	159	..	....	
		Perunkarunaipalayam.	53	..	..	..	53	..	....	
		Pudupalaiyam ..	793	..	..	..	793	..	....	
		Pulippar	72	..	..	..	72	..	....	
		Puluvapatti	111	..	..	..	111	..	....	
		Pumalur	291	..	..	..	291	..	....	

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
South Coimbatore—*cont.*	Palladam—*cont.*	Rakkiyapalaiyam ..	278	..	..	..	278	..	....	
		Samalapuram ..	52	..	..	..	52	..	....	
		Settipalaiyam ..	159	..	..	..	159	..	....	
		Senneripalayam ..	75	..	..	..	75	..	....	
		Sokkanur	132	..	..	..	132	..	....	
		Sokkampalayam ..	479	..	..	..	479	..	....	
		Tandakarampalayam.	83	..	..	..	83	..	....	
		Tattanur	289	..	..	..	289	..	....	
		Tekkalur	389	..	..	..	389	..	....	
		Taranallur	82	..	..	..	82	..	....	
		Tulukamuttur ..	60	..	..	..	60	..	....	
		Uppilipalayam ..	99	..	..	..	99	..	....	
		Vadugapalaiyam ..	57	..	..	..	57	..	....	
		Do.	293	..	..	..	293	..	....	
		Vallipuram	52	..	..	..	52	..	....	
		Velampalayam ..	81	..	..	..	81	..	....	
		Do.	75	..	..	..	75	..	....	
		Virapandi	175	..	..	..	175	..	....	
		Total ..	11,256	17·59	..	..	11,256	17·59		
Madura.	No. I or Cumbum valley.	Kombai	6,400	..	..	* 2,560	3,840	..	....	* Decreed in favour of the Zemindar of Tewaram.
		No. I, Vellaikaradu.	965	..	..	..	965	..	....	
		,, II, Sonaikaradu.	182	..	..	..	182	..	....	
		,, III, Mottaikaradu.	193	..	..	..	193	..	....	
		,, IV, Kuttaikaradu.	125	..	..	..	125	..	....	
		,, V, Nagarmalaikaradu.	118	..	..	..	118	..	....	
		,, VI, Perumalkovilkaradu.	573	..	..	..	573	..	....	
		,, VII, Sanniyasikovilkaradu.	283	..	..	..	283	..	....	
		Karugal Dhoni Medu.	2,560	..	..	2,560	..	..	....	Acres 1,920 were transferred to reserved forests and the balance struck off as overestimate.
		Adukkam	3,200	..	..	3,200	..	..	....	Transferred to reserved forests.
		Murugamalai ..	3,226	..	† 2,534	..	5,760	..	....	† By computation from survey maps.
		The southern slopes of the Palni hills.	25,600	..	..	† 3,200	22,400	..	....	
		The northern slopes of the Palni hills.	16,000	..	..	16,000	..	..	....	Only 12,800 acres were transferred to 59 A and the balance struck off as overestimate.
	No. II or Palni hill range.	Certain lands on the Lower Palni hills lying outside the limits of certain cultivated lands and cultivable waste.	32,000	..	..	‡ 30,080	1,920	..	....	‡ No proposals will be made regarding the conversions of these into forest reserves, as they are scattered, isolated open forests, parts of which have been let out for cardamom cultivation on 30 years' lease and with few exceptions of any value.
		Unjalanchi ..	157	..	† 99	256	..	..	....	Transferred to reserved forests.
		Kokkaparai ..	130	..	† 190	320	..	..	....	
		Manjakaraiar ..	1,600	..	..	..	1,600	..	....	
		Vanjankanal ..								
		Alayadikanal ..								
		Chikadikanal ..								
		Koviladikanal ..								
		Kumalarakadu ..								
		Talakodikadu ..								
		Tinnikutukadu ..								
		Periyasholakadu ..								
		Poliyapattimalai ..								
		Elamalai								
		Nedumbaraikadu ..								

Area of Reserved Lands, 1890–91—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Madura —*cont.*	No. III, Dindigul range.	Karandamalais ..	22,400	..	..	* 3,200	19,200	..	....	* By computation from survey maps.
		Panjantangi hills ..	3,200	..	..	..	3,200	..	....	
		Pulamalai	1,920	..	..	1,920	..	..	....	Only 800 acres were transferred to reserved forests and the rest struck off as overestimate.
		Waguthumalai ..	4,200	..	..	* 360	3,840	..	....	
		Kachaikatti	1,694	..	..	* 94	1,600	..	....	
		Kiluvamalai	..	..	† 1,920	..	1,920	..	....	† Omission in past year's return now supplied.
	No. IV, Alagar hill range.	Perumalai	2,560	..	* 7,040	9,600	..	..	....	Transferred to reserved forests.
		Tiruparangundram ..	960	..	..	..	960	..	....	
		Elephant rock ..	640	..	..	..	640	..	....	
		Ammánamalai ..	1,600	..	..	..	1,600	..	....	
		Mutupattimalai ..								
		Vandiyoor rock ..								
		Nallahavenpatti ..	1,920	..	..	..	1,920	..	....	
		Chembulimalai ..	1,600	..	..	1,600	..	..	....	Transferred to reserved forests.
		Mottamalai	1,280	..	..	1,280	..	..	....	Only 800 acres were transferred to reserved forests and the balance struck off as overestimate.
		Total ..	137,286	214·50	*11,783	76,230	72,839	113·81		
Tinnevelly.	Nangunéri.	Block I (*a*) ..	25,999	..	..	25,999	..	..	....	Transferred to reserved forests.
	Ambásamudram.	Do. II (*a*), (*b*) ..	53,819	..	..	53,819	..	..	....	
		Kolundamamalai ..	1,540	..	..	1,540	..	..	....	
	Tenkási.	Block III (*a*), (*b*), (*c*), (*d*).	10,643	..	..	..	10,643	..	....	
		Chinnakadu as defined in Mr. Barber's decision on the claims of inamdar.	2,560	..	..	2,560	..	..	....	Transferred to reserved forests.
	Sankaranainár koil.	Block, IV (*a*) ..	30,714	..	..	..	30,714	..	....	
		Chunambuparambu ..	286	..	..	286	..	..	....	Transferred to reserved forests.
		Sayamalai	294	..	..	..	294	..	....	
	Srívilliputár.	Block, V-(*a*)	40,006	..	..	..	40,006	..	....	
		Kottankulam ..	473	..	..	473	..	..	....	Transferred to reserved forests.
		Valaikulamparambu.	1,120	..	..	..	1,120	..	....	
	Tinnevelly.	Thalaiyuthu	890	..	..	..	890	..	....	
		Sivalaperi	263	..	..	..	263	..	....	
	Tenkarai.	Kudiraimalai ..	13,393	..	..	..	13,393	..	....	
		Kongarayakurichi ..	60	..	..	60	..	..	....	Transferred to reserved forests.
		Vallanad hills ..	4,666	..	..	..	4,666	..	....	
	Otapidáram.	Milavittam	709	..	..	..	709	..	....	
		Virusampatti ..	294	..	..	294	..	..	....	Transferred to reserved forests.
		Vaippar	813	..	..	..	813	..	....	
		Total ..	188,542	294·60	..	85,031	103,511	161·74		
North Malabar.	Wynaad.	Palepattur	746	..	..	..	746	..	....	
		Vengur	5,470	..	..	..	5,470	..	....	
		Chedlet	517	..	..	..	517	..	....	
		Karpur	753	..	..	..	753	..	....	
		Kalur	213	..	..	..	213	..	....	
		Kudrakote	21,502	..	..	..	21,502	..	....	
		Padri	30,468	..	..	..	30,468	..	....	
		Cardamom forest ..	13,683	..	..	..	13,683	..	....	
		Kanot	25,600	..	..	..	25,600	..	....	
		Chapparam	112	..	..	..	112	..	....	
		Panniyatta	150	..	..	..	150	..	....	
		Adavankunnu ..	39	..	..	39	..	..	....	Transferred to reserved forests.
		Total ..	99,253	155·08	..	39	99,214	155·02		

Area of Reserved Lands, 1890–91—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
South Malabar.	Nilambúr range.	Nilambúr block ..	5,036	..	..	..	5,036	..	....	Leased.
		Pokote,.	761	..	..	..	761	..	....	
		Panangod	859	..	..	..	859	..	....	
		Valluvasheri	914	..	..	..	914	..	....	
		Kanakut	669	..	..	..	669	..	....	
		Erambadam	581	..	..	..	581	..	....	
		Ambelakandi ..	1	..	..	..	1	..	....	
		Arimbrahutamala ..	322	..	..	..	322	..	....	
		Mangalasheriparamba.	11	..	..	..	11	..	....	
		Puttalatta and Chittarikkal paramba.	8	..	..	..	8	..	....	
		The silent valley ..	17,280	..	..	..	17,280	..	....	
	Amarampalam.	Muriyat	1,765	..	..	..	1,765	..	....	Leased forest.
		Karian	1,002	..	..	..	1,002	..	....	
		The new Amarampalam forest.	96,000	..	..	..	96,000	..	....	
	Pálghat ..	Chathamkulamkarai paramba.	30	..	..	..	30	..	....	
		Thamburattapottai, *alias* Pilacheri Pallam.	100	..	..	..	100	..	....	
		Tiruvashamkunnu *alias* Panakadam.	1,000	..	..	..	1,000	..	....	
	Waluvanád.	Block No. II ..	24,320	..	..	..	24,320	..	....	
		,, ,, III (*a*) ..	12,800	..	..	..	12,800	..	....	
		,, ,, III (*b*), I and III (*b*), II.	4,480	..	..	..	4,480	..	....	
		Block Nos. IV (*a*), IV (*b*) and IV (*c*).	16,640	..	..	..	16,640	..	....	
		Total ..	184,579	288·40	..	..	184,579	288·40		
South Canara.	Coondapoor.	Harkur block	858	..	..	..	858	..	....	
		Kasanakatte	262	..	..	..	262	..	....	
		Talabur Ane	640	..	..	..	640	..	....	
		Gundaberpare ..	3,200	..	..	..	3,200	..	....	
		Jennal Ane	1,280	..	..	..	1,280	..	....	
		Korakoppadahola ..	640	..	..	..	640	..	....	
	Udipi ..	Tenkahola	2,039	..	..	..	2,039	..	....	
	Mangalore.	Andar reserve ..	22,334	..	..	22,334	..	..	....	Transferred to reserved forests.
		Todar reserve ..	458	..	..	458	..	..	....	
	Uppinangádi.	Muji Malai	3,200	..	..	..	3,200	..	....	
		Dharmastal Mundoji.	9,600	..	..	..	9,600	..	....	
		Charmadi Kanapadi..	12,800	..	..	..	12,800	..	....	
	Kasaragód	Parappa	7,680	..	..	..	7,680	..	....	
		Lands reserved under Rule 2, section 26 of the Forest Act.								
	Udipi ..	....	73,443	..	..	..	73,443	..	....	
	Coondapoor.	....	136,058	..	* 1,062	..	137,120	..	....	* Due to rectification of area.
	Mangalore.	....	27,693	..	..	..	27,693	..	....	
	Uppinangádi.	....	288,000	..	..	..	288,000	..	....	
	Kásaragód	....	32,920	..	..	..	32,920	..	....	
		Total ..	623,105	973·60	1,062	22,792	601,375	939·65		
		Grand Total ..	3,533,267	5,520·72	228,348	288,136	3,473,479	5,427·31		

ABSTRACT.

Chinglepnt	54,181	84·66	3,250	21,174	36,257	56·65	
North Arcot	368,480	575·75	..	34,164	334,316	522·37	
South Arcot	275,434	430·37	167,140	19,382	423,192	661·24	
Salem	346,029	540·67	45,113	26,729	364,413	569·40	
Trichinopoly	63,687	99·51	..	2,595	61,092	95·45	
Tanjore	10,119	15·81	..	..	10,119	15·81	
North Coimbatore	1,171,316	1,830·18	..	..	1,171,316	1,830·18	
South Coimbatore	11,256	17·59	..	..	11,256	17·59	
Madura	137,286	214·50	11,783	76,230	72,839	113·81	
Tinnevelly	188,542	294·60	..	85,031	103,511	161·74	
North Malabar	99,253	155·08	..	39	99,214	155·02	
South Malabar	184,579	288·40	..	..	184,579	288·40	
South Canara	623,105	973·60	1,062	22,792	601,375	939·65	
Total ..	3,533,267	5,520·72	228,348	288,136	3,473,479	5,427·31	

Annual Form No. 59.

Forest Department, Madras, Southern Circle.

Area of Other Forests, 1890–91.

District.	Range.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Chingleput ..	Saidápet	488	..	..	* 2,963	..	..	..	* Transferred to reserved lands.
	Chingleput	10,619				11,023	..	..	
	Tiruvallúr	1,342				..	..	..	
		4,605				3,068	..	..	
	Total ..	17,054	26·65	..	2,963	14,091	22·02		
North Arcot.	....	..	..	..	..	..	..	..	
South Arcot.	No. I, Tiruvannámalai.	86,466	..	..	..	..	..	..	
	,, II, Tindivanam.	12,500				12,500	..	..	
	,, III, Villupuram.	6,000				6,000	..	..	
	,, IV, Chidambaram.	7,700				..	..	..	
	,, VI, Kallakurichi.	68,000	..	..	† 166,703	26,403	..	..	† Transferred to reserved lands.
	,, VII, Vriddháchalam.	30,940				..	..	..	
	Area originally intended to be constituted village forests.	120,320				120,320	..	..	
	Total ..	331,926	518·63	..	166,703	165,223	258·16		
Salem ..	Atúr	33,880	..	..	18,760	15,120	..	..	
	Tirupatúr	28,515	..	..	2,456	26,059	..	..	
	Námakál	17,500	..	..	..	17,500	..	..	
	Utankarai	41,120	..	..	21,600	19,520	..	..	
	Krishnagiri	15,376	..	2,560	5,633	12,303	..	..	
	Hosúr	69,920	..	..	14,000	55,920	..	..	
	Total ..	206,311	322·36	2,560	‡ 62,449	146,422	228·78		‡ 45,113 transferred to reserved lands and 17,336 excluded.
Trichinopoly	Trichinopoly ..	2,681	..	..	..	2,681	..	..	
	Udayárpalaiyam ..	3,917	..	..	..	3,917	..	..	
	Kulitalai	5,837	..	..	..	5,837	..	..	
	Musiri	13,485	..	..	..	13,485	..	..	
	Perambalúr	678	..	..	..	678	..	..	
	Total ..	26,598	41·56	..	..	26,598	41·56		
Tanjore.	Southern Range ..	6,081	..	..	..	6,081	..	..	
	To be proposed for notification under section 4.	20,485	..	..	..	20,485	..	..	
	Total ..	26,566	41·50	..	..	26,566	41·50		
North Coimbatore.	....	..	..	..	..	..	..	..	
South Coimbatore.	Udamalpet	654	..	..	..	654	..	..	
	Polláchi	121	..	..	..	121	..	..	
	Palladam	473	..	..	..	473	..	..	
	Bolampatti	64	..	..	..	64	..	..	
	Total ..	1,312	2·05	..	..	1,312	2·05		

Area of Other Forests, 1890-91—*cont.*

Districts.	Range.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Madura.	No. I, Cumbum valley.	22,867	..	15,226	5,607	32,486	..	..	
	,, II, Palni hill ..	32,000	..	57,600	..	89,600	..	..	
	,, III, Dindigul ..	14,210	..	28,616	..	42,826	..	..	
	,, IV, Alagar hill ..	18,291	..	15,303	10,060	23,534	..	..	
	Total ..	87,368	136·51	116,745	* 15,667	188,446	294·45		* Excluded.
Tinnevelly.	Tenkarai	1,133	..	..	..	1,133	..	..	
	Nángunéri	9,691	..	..	..	9,691	..	..	
	Total ..	10,824	16·91	..	..	10,824	16·91		
North Malabar.	Wynaad	214,400	335·00	..	..	214,400	335·00	..	
South Malabar.	Pálghat	150	·23	..	† 61	89	·14	..	† Made over to one Subramonia Pattar for agricultural purpose.
South Canara.	....	..	..	..	..	..	..	..	
	Grand Total ..	922,509	1441·40	119,305	247,843	793,971	1,240·57		

Abstract.

District.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.
Chingleput	17,054	26·65	..	2,963	14,091	22·02
North Arcot	..	..	..	..	..	..
South do.	331,926	518·63	..	166,703	165,223	258·16
Salem	206,311	322·36	2,560	62,449	146,422	228·78
Trichinopoly	26,598	41·56	..	..	26,598	41·56
Tanjore	26,566	41·50	..	..	26,566	41·50
North Coimbatore	..	..	..	..	..	..
South do.	1,312	2·05	..	..	1,312	2·05
Madura	87,368	136·51	116,745	15,667	188,446	294·45
Tinnevelly	10,824	16·91	..	..	10,824	16·91
North Malabar	214,400	335·00	..	..	214,400	335·00
South do.	150	·23	..	61	89	·14
South Canara	..	..	..	..	..	..
Total ..	922,509	1,441·40	119,305	247,843	793,971	1,240·57

ANNUAL FORM No. 60.

Forest Department, Madras, Southern Circle.

AREA of Plantations, 1890-91.

District.	Number of plantations.	On 1st April 1890.		Added during 1890-91.		On 31st March 1891.	
		Area.	Cost.	Area.	Cost.	Area.	Cost.
Regular plantations—		ACS.	RS.	ACS.	RS.	ACS.	RS.
Chingleput	6	396·09	31,816	..	1,052	396·09	32,868
North Arcot	5	1,035·	98,430	..	5,381	1,035·	1,03,811
South do.	15	1,861·05	1,05,899	* 6	3,753	1,867·05	1,09,652
Salem	..	..	..	..	..	..	..
Trichinopoly	22	3,754·01	90,151	..	2,864	3,754·01	93,015
Tanjore	5	708·	13,955	..	1,338	708·	15,293
North Coimbatore	1	97·	34,153	..	932	97·	35,085
South do.	4	26·50	4,810	..	..	26·50	4,810
Madura	8	85·14	13,192	20	4,061	105·14	17,253
Tinnevelly	..	..	..	..	..	..	..
North Malabar	1	41·50	4,058	..	180	41·50	4,238
South do.	16	3,869·75	2,41,793	100	8,763	3,969·75	2,50,556
South Canara	3	170·18	22,716	..	784	170·18	23,500
Total	86	12,044·22	6,60,973	126	29,108	12,170·22	6,90,081
Cultural operations—							
Direction	..	..	1,141	..		..	1,141
Chingleput	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	..
South do.	3	1,326	1,327	..	206	1,326	1,533
Salem	..	..	..	..	..	..	..
Trichinopoly	10	mls. 100	29,595	..	566	mls. 100	30,161
Tanjore	20	1,126	1,973	10	48	1,136	2,021
North Coimbatore	..	..	..	..	..	..	..
South do.	..	..	..	..	508	..	508
Madura	..	..	..	..	19	..	19
Tinnevelly	7	1,642	3,010	165	713	1,807	3,723
North Malabar	2	109	1,950	..	88	109	2,038
South do.	..	..	..	..	..	..	..
South Canara	..	..	38	..	..	..	38
Total	42	4,203 + 100 mls.	39,034	175	2,148	4,378 + 100 mls.	41,182

* Result of Survey.

ANNUAL FORM No. 61.

Forest Department, Madras, Southern Circle.

ANNUAL LIST of Topes and Experimental Gardens, 1890-91.

District.	Number.	Area.	Cost.	
			During year.	To end of year.
		ACS.	RS.	RS.
Chingleput	8	93	239	8,454
North Arcot	641	749	1,664	33,983
South do.	94	391	56	8,813
Salem	263	3,061	1,177	1,98,819
Trichinopoly	17	81	14	1,793
Tanjore	16	153	..	..
North Coimbatore	183	14,032	96	28,971
South do.	7	101	153	5,361
Madura	23	101	3,799	18,637
Tinnevelly	28	106	186	4,676
North Malabar	1	20	202	2,967
South do.	2	3	..	9
South Canara	..	..	..	..
Total	1,283	18,891	7,586	3,12,483

ANNUAL FORM No. 62.

Forest Department, Madras, Southern Circle.

AREA of Forest Tracts protected from Fire during 1890-91.

District.	UP TO 31ST MARCH 1890.		DURING DRY SEASON OF 1890-91.				Total cost up to 31st March 1891.
	Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.	
	ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.
Chingleput	23,294	3,315	23,294	200	23,094	512	3,827
North Arcot	544,876	17,794	558,187	2,374	555,813	2,289	20,083
South do.	128,920	6,495	130,243	2,700	127,543	875	7,370
Salem	30,651	16,645	30,979	13	30,966	2,066	18,711
Trichinopoly	55,530	2,337	79,750	..	79,750	215	2,552
Tanjore	..	..	..	..	..	..	..
North Coimbatore ..	2,337	1,278	2,364	..	2,364	294	1,572
South do. ..	47,167	8,712	55,803	35	55,768	2,021	10,733
Madura	192,218	27,319	193,975	4,290	189,685	5,052	32,371
Tinnevelly	94,705	16,069	106,239	2,700	103,539	4,174	20,243
North Malabar	33,420	5,545	33,462	680	32,782	1,154	6,699
South do.	43,803	12,078	78,120	4,000	74,120	2,190	14,268
South Canara	16,252	3,687	16,381	25	16,356	1,379	5,066
Total ..	1,213,173	1,21,274	1,308,797	17,017	1,291,780	22,221	1,43,495

Charged in previous years	1,01,080
Do. in 1889-90	20,194
Do. in 1890-91	22,221
Total ..	1,43,495

ANNUAL FORM No. 63.

Forest Department, Madras, Southern Circle.

PROSECUTIONS for Breaches of Forest Rules during 1890-91.

District.	Cases pending from 1889-90.	NEW CASES OF THE YEAR.					Total cases.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1	2	3	4	5	6	7	8
Chingleput	..	..	146	..	10	156	156
North Arcot	7	1	165	149	19	334	341
South Arcot	105	7	291	362	63	723	828
Salem	29	10	499	199	39	747	776
Trichinopoly	78	3	371	364	9	747	825
Tanjore	4	..	17	5	4	26	30
North Coimbatore	7	..	36	51	45	132	139
South Coimbatore	12	4	146	171	28	349	361
Madura .. Under Forest Act ..	..	3	13	1	..	17	17
Madura .. Under Penal Code ..	..	..	1	..	..	1	1
Tinnevelly .. Under Forest Act ..	..	6	51	34	17	108	108
Tinnevelly .. Under Penal Code ..	5	..	..	2	14	16	21
North Malabar	..	2	12	1	7	22	22
South Malabar. Under Forest Act ..	1	..	5	..	26	31	32
South Malabar. Under Penal Code ..	1	..	1	..	..	1	2
South Canara	69	1	259	..	2	262	331
Total ..	318	37	2,013	1,339	283	3,672	3,990

District.	DISPOSED OF DURING THE YEAR.										Cases pending at close of year.
	Convictions.		Acquittals.		Compounded.		Withdrawn.		Total.		
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15	16	17	18	19	
Chingleput	100	215	39	84	16	24	..	..	155	323	1
North Arcot	77	127	43	177	209	417	..	..	329	721	12
South Arcot	87	209	17	52	344	909	20	54	468	1,224	360
Salem	457	1,635	105	494	133	499	49	124	744	2,752	32
Trichinopoly	271	548	62	181	438	766	..	..	771	1,495	54
Tanjore	9	110	..	..	9	45	..	..	18	155	12
North Coimbatore	7	29	8	22	72	180	12	52	99	283	40
South Coimbatore	72	284	4	33	212	735	14	40	302	1,092	59
Madura .. Under Forest Act ..	8	33	5	22	2	5	..	..	15	60	2
Madura .. Under Penal Code ..	1	1	..	..	..	..	..	..	1	1	..
Tinnevelly. Under Forest Act ..	67	193	24	75	5	5	8	27	104	300	4
Tinnevelly. Under Penal Code ..	16	63	..	2	..	..	..	..	16	65	5
North Malabar	5	13	1	1	16	27	..	..	22	41	..
South Malabar. Under Forest Act ..	22	38	9	16	1	6	..	..	32	60	..
South Malabar. Under Penal Code ..	2	4	..	1	..	..	..	..	2	5	..
South Canara	187	275	28	54	55	64	..	..	270	393	61
Total ..	1,388	3,777	345	1,214	1,512	3,682	103	297	3,348	8,970	642

ANNUAL FORM No. 64.

Forest Department, Madras, Southern Circle.

SUMMARY of Revenue of the different districts, 1890-91.

Budget heads.	Direction.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the Forests by Government Agency—															
(*a*) Timber	..	..	1,743	2,024	1,292	30	..	..	43,020	2,875	5,781	18,911	40,095	2,846	1,18,617
(*b*) Firewood and charcoal	..	689	31,803	4,737	..	11,664	259	..	988	4,464	5,270	..	759	1,764	62,397
(*c*) Bamboos	..	..	38	..	83	..	..	..	..	1,036	33	..	1,885	3	3,078
(*d*) Sandalwood.. ..	..	..	8,345	1,169	5,411	..	..	2,000	..	..	..	..	..	..	16,925
(*e*) Grass and other minor produce ..	..	..	..	..	..	..	..	..	11,533	..	766	179	608	41,946	55,032
II. Timber and other produce removed from the Forests by consumers or purchasers—															
(*a*) Timber	..	3,133	28,134	7,440	26,131	15,188	644	9,781	8,113	19,553	6,974	6,282	5,767	1,621	1,38,761
(*b*) Firewood and charcoal	..	6,325	39,757	12,936	32,406	13,980	3,669	8,061	13,755	5,597	42,026	3	4,748	4,151	1,87,414
(*c*) Bamboos	..	227	27,876	6,106	27,864	4,094	116	15,738	6,744	2,426	570	389	569	888	93,607
(*d*) Grazing and fodder grass	..	2,337	7,885	4,829	14,096	6,515	576	20,694	8,083	2,319	838	447	126	..	68,745
(*e*) Other minor produce	..	18,985	52,060	32,098	43,904	26,313	3,806	41,992	8,241	24,795	16,647	1,146	71	1,627	2,71,685
III. Confiscated, drift and waifwood	..	22	1,124	164	717	89	2	823	318	86	779	21	37	237	4,419
IV. Revenue from Forests not managed by Government.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V. Miscellaneous—															
(*a*) Fines and forfeitures	..	..	272	27	1,838	..	..	..	251	1	570	..	115	..	3,074
(*b*) Refunds	2,958	134	47	307	56	145	..	102	123	345	500	56	3	110	4,886
(*c*) Other sources ..	49	116	2,708	5,411	1,102	1,611	59	2,123	2,491	1,654	703	1,021	1,158	1,015	21,221
Total ..	3,007	31,968	2,01,792	77,248	1,54,900	79,629	9,131	1,01,314	1,03,660	65,151	81,457	28,455	55,941	56,208	10,49,861

MADRAS,
3rd July 1891.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

Annual Form No. 64.

Forest Department, Madras, Southern Circle.

Summary of Expenditure of the different districts, 1890–91.

Budget heads.	Direction.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
A.—Conservancy and Works.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the Forests by Government Agency—															
(*a*) Timber	..	..	304	892	1,331	..	..	..	16,421	3,630	5,005	1,928	9,730	1,245	40,486
(*b*) Firewood and charcoal	..	..	7,558	3,180	111	7,378	44	..	1,871	5,403	1,369	..	3	1,035	27,952
(*c*) Bamboos	..	..	29	..	33	..	..	..	..	868	53	..	1	1	985
(*d*) Sandalwood	..	..	246	20	441	..	..	375	..	..	..	..	..	..	1,082
(*e*) Grass and other minor produce	..	..	3	..	..	..	..	..	6,443	..	340	33	357	21,584	28,760
II. Timber and other produce removed from the Forests by consumers or purchasers	81	1,112	5,752	2,515	12,054	2,414	388	7,961	3,865	3,131	1,896	..	43	3,736	44,948
III. Confiscated, drift and waifwood	..	..	86	25	89	..	5	209	5	7	192	..	4	1	623
IV. Revenue from Forests not managed by Government	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V. Rent of leased Forests and payments to shareholders in Forests managed by Government	..	..	..	..	..	..	..	..	2,500	..	..	..	651	..	3,151
VI. Live-stock, stores, tools and plant—															
(*a*) Purchase of cattle	..	..	..	..	..	..	..	..	767	15	..	153	424	..	1,359
(*b*) Feed and keep of cattle	..	..	..	..	..	27	..	..	4,673	1,011	..	2,112	5,552	..	13,375
(*c*) Stores, tools and plant	552	32	895	142	39	168	85	4	481	292	157	95	92	745	3,779
VII. Communications and buildings—															
(*a*) Roads and bridges	..	213	1,288	1,813	..	128	..	1,998	2,849	8,546	3,613	471	471	..	21,390
(*b*) Buildings	..	289	2,240	1,060	983	80	20	364	4,979	3,834	2,416	1,852	3,968	216	22,301
(*c*) Other works	..	..	..	7	..	..	..	..	..	..	2	119	31	75	234
VIII. Demarcation, improvement and extension of forests—															
(*a*) Demarcation	..	2,553	3,241	720	2,710	184	159	864	6,509	1,426	407	316	286	867	20,242
(*b*) Compensation for land and rights	1	25	4,159	204	272	540	..	..	..	61	..	450	70	..	5,782
(*c*) Surveys and working plans.	70,634	78	289	77	364	177	17	329	716	4,655	2,730	16	11	720	80,813
(*d*) Plantations	..	1,291	7,045	4,016	1,177	3,443	1,386	1,029	661	7,878	898	471	8,763	784	38,842
(*e*) Protection from fire	..	512	2,289	875	2,066	214	..	295	2,021	5,052	4,174	1,154	2,190	1,379	22,221
(*f*) Other works	6	1,894	6,018	4,602	6,715	4,387	1,951	306	1,148	..	4,261	54	724	436	32,502
IX. Miscellaneous—															
(*a*) Refunds	..	..	296	2,279	123	20	696	363	113	201	170	1,036	3	184	5,484
(*b*) Law charges	..	..	4	..	67	..	1	5	16	28	59	1,642	23	40	1,885
(*c*) Other charges	..	2,005	71	5	102	2	31	18	107	18	19	85	15	54	2,532
Total A.—Conservancy and Works	71,274	10,004	41,813	22,432	28,677	19,162	4,783	14,120	56,145	46,056	27,761	11,987	33,412	33,102	4,20,728

Madras,
3d July 1891.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras, Southern Circle.

SUMMARY of Expenditure of the different districts, 1890-91.

Budget heads.	Direction.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
B.—*Establishments.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward, Total A.—Conservancy and Works ..	71,274	10,004	41,813	22,432	28,677	19,162	4,783	14,120	56,145	46,056	27,761	11,987	33,412	33,102	4,20,728
I. Salaries—															
(*a*) Conservators	18,363	..	..	..	..	..	..	..	..	..	..	..	..	..	18,363
(*b*) Superior officers ..	20,593	3,167	3,045	7,811	10,541	10,068	250	10,302	8,300	11,600	7,809	3,000	8,771	6,207	1,11,464
(*c*) Subordinate Forest and depôt establishments	1,775	3,357	11,143	11,119	10,897	4,449	2,271	6,511	9,092	7,667	7,391	5,517	5,583	4,828	91,591
(*d*) Office establishments..	19,716	1,220	2,540	2,853	2,740	1,780	650	2,885	2,945	2,155	2,706	2,670	1,601	2,046	48,507
(*e*) Deputation and special allowances	1,044	..	..	..	..	..	..	..	..	..	..	..	..	..	1,044
II. Travelling allowances—															
(*a*) Conservators	2,506	..	..	..	..	..	..	..	..	..	..	..	..	..	2,506
(*b*) Superior officers ..	4,471	989	997	666	869	529	133	1,194	1,695	1,949	2,303	837	1,107	917	18,656
(*c*) Subordinate Forest and depôt establishments	790	812	2,956	2,816	2,945	1,473	497	1,896	2,677	2,055	2,239	1,675	1,634	1,248	25,713
(*d*) Office establishments..	2,936	161	266	304	206	215	164	245	410	476	541	252	128	241	6,545
III. Contingencies—															
(*a*) Stationery	37	..	..	..	2	..	..	..	..	..	..	..	..	..	39
(*b*) Carriage of tents and records	1,123	80	91	135	135	54	103	110	66	212	231	31	..	227	2,598
(*c*) Rents, rates and taxes .	474	1	24	625	56	276	..	55	64	14	20	..	..	2	1,611
(*d*) Pay of Police guards..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(*e*) Official postage ..	1,129	231	704	637	966	401	162	384	319	558	650	112	142	648	7,043
(*f*) Sundries	1,512	149	175	279	313	143	56	652	484	362	572	289	207	128	5,321
Total B.—Establishments ..	76,469	10,167	21,941	27,236	29,670	19,388	4,286	24,234	26,052	27,048	24,462	14,383	19,173	16,492	3,41,001
Grand Total of Expenditure ..	1,47,743	20,171	63,754	49,668	58,347	38,550	9,069	38,354	82,197	73,104	52,223	26,370	52,585	49,594	7,61,729

MADRAS,
3rd July 1891.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

ANNUAL FORM No. 65.

Forest Department, Madras, Southern Circle.

OUTSTANDINGS and liabilities on account of contractors and disbursers for 1890-91.

District.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Conservator, Southern Circle	..	1,947 8 6	1,947 8 6	70 14 0	2,086 11 0	2,157 9 0	210 0 6	..
Forest Settlement-officer, Chingleput, &c.	..	295 10 3	295 10 3	..	295 10 3	295 10 3	..	..
Do. do. Salem, &c.	..	290 8 8	290 8 8	290 8 8	..	290 8 8	..	..
Sericultural operations	..	25 0 0	25 0 0	..	25 0 0	25 0 0	..	..
Forest School, Dehra Dún	..	365 5 4	365 5 4	86 0 0	349 0 0	435 0 0	69 10 8	..
Three-fifths of Examiner's office	..	2,614 10 9	2,614 10 9	463 8 10	2,240 6 5	2,703 15 3	89 4 6	..
Chingleput	..	12,101 0 6	12,101 0 6	51 9 1	12,138 9 0	12,190 2 1	89 1 7	..
North Arcot	..	59,988 12 5	59,988 12 5	235 15 8	62,864 3 7	63,100 3 3	3,111 6 10	..
South do.	..	48,498 10 9	48,498 10 9	680 6 0	49,518 2 11	50,198 8 11	1,699 14 2	..
Salem	..	46,909 9 6	46,909 9 6	350 8 1	47,462 9 4	47,813 1 5	903 7 11	..
Trichinopoly	..	27,530 6 11	27,530 6 11	78 6 4	27,638 9 5	27,716 15 9	186 8 10	..
Tanjore	..	7,460 10 2	7,460 10 2	46 6 5	7,474 13 3	7,521 3 8	60 9 6	..
North Coimbatore	..	22,751 13 0	22,751 13 0	674 0 1	22,218 12 2	22,892 12 3	140 15 3	..
South do.	..	39,522 3 10	39,522 3 10	1,425 14 4	39,544 15 3	40,970 13 7	1,448 9 9	..
Madura	..	84,922 15 11	84,922 15 11	2,870 7 6	83,096 5 10	85,966 13 4	1,043 13 5	..
Tinnevelly	..	53,558 8 8	53,558 8 8	2,259 2 3	53,795 9 10	56,054 12 1	2,496 3 5	..
North Malabar	..	10,902 8 8	10,902 8 8	967 5 11	10,886 6 9	11,853 12 8	951 4 0	..
South do.	..	14,845 1 8	14,845 1 8	447 3 1	14,805 14 11	15,253 2 0	408 0 4	..
South Canara	..	39,281 11 6	39,281 11 6	12,296 15 5	34,790 8 3	47,087 7 8	7,805 12 2	..
Total ..	..	4,73,812 13 0	4,73,812 13 0	23,295 3 8	4,71,232 4 2	4,94,527 7 10	20,714 10 10	..

MADRAS,
3rd July 1891.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

ANNUAL FORM No. 66.

Forest Department, Madras, Southern Circle.

REVENUE received and outstandings on account of revenue during 1890-91.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other Revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Direction	Timber and other produce ..	..	3,006 14 2	3,006 14 2	3,006 14 2	..	(*a*) Written off the accounts Rs. 4-4-6—*vide* Conservator's Sanction Order No. 175 of 1890–91.
Chingleput	Do. do. ..	..	31,968 5 4	31,968 5 4	31,968 5 4	..	
North Arcot	Do. do. ..	791 1 1	2,02,785 6 0	2,03,576 7 1	2,01,791 12 0 (*a*) + 4 4 6	1,780 6 7	(*b*) Written off the accounts—
South do.	Do. do. ..	1,169 0 1	78,680 14 11	79,849 15 0	77,248 7 0	2 601 8 0	RS. A. P. 15 0 0 *Vide* Board's Proceedings, dated 16th September 1889, No. 637.
Salem	Do. do. ..	2,631 4 4	1,53,800 1 7	1,56,431 5 11	1,54,900 0 2 (*b*) + 89 14 6	1,441 7 3	
Trichinopoly	Do. do. ..	2,197 13 9	81,696 8 9	83,894 6 6	79,628 9 6 (*c*) + 74 12 0	4,191 1 0	15 0 0 *Vide* Board's Proceedings, dated 21st October 1890, Mis. No. 1100.
Tanjore	Do. do. ..	594 0 0	8,572 15 5	9,166 15 5	9,130 15 5	36 0 0	
North Coimbatore ..	Do. do. ..	1,428 7 7	1,04,415 13 6	1,05,844 5 1	1,01,313 11 10	4,530 9 3	
South do. ..	Do. do. ..	805 13 1	1,04,143 9 6	1,04,949 6 7	1,03,660 5 11	1,289 0 8	59 14 6 *Vide* Conservator's Sanction Order No. 75 of 1890–91.
Madura	Do. do. ..	1,260 6 11	66,464 9 2	67,725 0 1	65,150 11 8	2,574 4 5	
Tinnevelly	Do. do. ..	975 13 10	82,217 8 1	83,193 5 11	81,457 5 11	1,736 0 0	
North Malabar	Do. do. ..	1,471 0 0	28,560 3 1	30,031 3 1	28,455 3 1 (*d*)+ 1,391 0 0	185 0 0	89 14 6
South do.	Do. do. ..	58 0 0	56,057 10 4	56,115 10 4	55,940 10 4	175 0 0	
South Canara	Do. do. ..	1,118 15 6	57,817 5 6	58,936 5 0	56,207 9 0	2,728 12 0	(*c*) 32 4 0 *Vide* Board's Proceedings, No. 288, dated 27th May 1890.
							42 8 0 *Vide* Forest No. 1235 Mis., dated 28th November 1890.
							74 12 0
							(*d*) 1,391 0 0 Written off the accounts—*vide* Board's Proceedings, dated 11th April 1890, Mis. No. 411.
	Total ..	14,501 12 2	10,60,187 13 4	10,74,689 9 6	10,49,860 9 4 + 1,559 15 0	23,269 1 2	

MADRAS,
3rd July 1891.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

ANNUAL FORM No. 67.

Forest Department, Madras, Southern Circle.

FINANCIAL Results of the year 1890–91.

District.	TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY.		OTHER REVENUE.		FORMATION, PROTECTION AND IMPROVEMENT OF FORESTS.	TOTAL.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Chingleput	689	201	31,398	13,472	12,336	32,087	26,009
North Arcot	41,929	13,664	1,60,471	25,646	42,218	2,02,400	81,528
South do.	7,930	8,088	69,581	31,224	23,664	77,511	62,976
Salem	6,786	3,660	1,48,677	45,234	24,422	1,55,463	73,316
Trichinopoly	11,694	12,026	68,193	19,920	16,230	79,887	48,176
Tanjore	259	152	8,906	4,758	6,907	9,165	11,817
North Coimbatore ..	2,000	1,003	99,692	39,010	7,487	1,01,692	47,500
South do. ..	55,541	50,295	48,302	16,466	30,450	1,03,843	97,211
Madura	8,375	16,378	56,992	26,218	49,732	65,367	92,328
Tinnevelly	11,850	11,782	69,872	24,380	30,285	81,722	66,447
North Malabar	19,090	14,202	9,400	6,052	12,851	28,490	33,105
South do.	43,347	32,076	12,642	3,677	29,052	55,989	64,805
South Canara	46,559	40,161	9,686	7,200	9,150	56,245	56,511
Total ..	2,56,049	2,03,688	7,93,812	2,63,257	2,94,784	10,49,861	7,61,729

ANNUAL FORM No. 68.

Forest Department, Madras, Southern Circle.

TREES felled by Government Agency during the year 1890–91.

(Selection fellings.)

—	Teak.	Rosewood.	Vengai.	Other timbers.	Sandal-wood.	Total.
	NO.	NO.	NO.	NO.	NO.	NO.
Stock of the Circle at the beginning of the year ..	18	13	2	269	..	302
Chingleput	..	..	..	..	..	..
North Arcot	..	..	..	209	..	209
South do.	..	..	3	301	..	304
Salem	..	..	..	1,267	515	1,782
Trichinopoly	..	..	..	..	..	..
Tanjore	..	..	..	..	..	..
North Coimbatore	..	..	..	..	..	..
South do.	398	10	39	222	..	669
Madura	25	57	197	29	..	308
Tinnevelly	..	..	..	31	..	31
North Malabar	695	27	19	1	..	742
South do.	348	12	39	552	..	951
South Canara	15	8	10	77	..	110
Total number of trees felled during the year by selection felling	1,481	114	307	2,689	515	5,106
Total ..	1,499	127	309	2,958	515	5,408
Converted into logs, &c., and shown in Form No. 69	1,484	116	289	* 2,725	515	5,129
Balance on hand at the end of the year	15	11	20	233	..	279

* Includes 6 rejected as being useless.

ANNUAL FORM No. 69.

Forest Department, Madras, Southern Circle.

STATEMENT of Timber and other Produce cut and collected by Government Agency during the year 1890–91.

	Timbers.						Fuel.	Bamboos.	Sandalwood.	Minor produce.
	Teak.	Rosewood.	Vengai.	Other timbers.	Redwood.	Total timbers.				
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NOS.	C. FT.	MDS.
Stock of the Circle at the beginning of the year ..	72,208	6,111	2,062	53,828	..	134,209	22,349	3,617	91	10,175
Chingleput	..	..	..	..	..	..	7,546	..	..	..
North Arcot	..	..	..	4,093	..	4,093	297,934	1,883	..	..
South do.	..	..	16	3,380	..	3,396	74,616	..	..	..
Salem	..	..	..	1,900	..	1,900	..	1,420	582	..
Trichinopoly	..	..	..	..	..	..	205,259	..	..	..
Tanjore	..	..	..	..	..	..	1,160	..	..	..
North Coimbatore ..	..	..	..	..	..	..	..	..	703	..
South do. ..	11,891	675	1,401	5,748	..	19,715	61,831	..	..	2,145
Madura	578	1,053	3,241	779	..	5,651	64,544	17,148	..	..
Tinnevelly	2,423	..	..	3,876	..	6,299	166,818	146	..	285
North Malabar	34,762	727	856	358	..	36,703	..	..	..	32
South do.	33,842	2,814	30	26,547	..	63,233	4,774	21,831	..	427
South Canara	317	390	..	10,727	..	11,434	15,866	50	..	13,277
Collection during the year for the Circle	83,813	5,659	5,544	57,408	..	152,424	900,348	42,478	1,285	16,166
Total ..	156,021	11,770	7,606	111,236	..	286,633	922,697	46,095	1,376	26,341
Sold locally in the forest..	49,087	4,423	3,354	44,250	..	101,114	756,935	13,364	694	22,360
Used departmentally, wastage, written off, &c. ..	4,124	..	2	6,986	..	11,112	974	1,165	..	93
Removed to sale depôts ..	60,975	3,381	1,420	35,310	..	101,086	108,896	22,398	682	363
Total disposal ..	114,186	7,804	4,776	86,546	..	213,312	866,805	36,927	1,376	22,816
Stock in the forest on 31st March 1891	41,835	3,966	2,830	24,690	..	73,321	55,892	9,168	..	3,525

ANNUAL FORM No. 70.

Forest Department, Madras Southern Circle.

RECEIPTS and issues of timber and other produce in sale depôts during the year 1890–91.

	TIMBERS.									
	Teak.	Rosewood.	Vengai.	Other timbers.	Redwood roots.	Total timbers.	Fuel.	Bamboos.	Sandalwood.	Minor produce.
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Stock of the Circle at sale depôts at the beginning of the year	27,242	305	..	2,154	25,575	55,276	9,106	4,700	1,901	19
Chingleput	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	19,578	..	..	..
South do.	..	..	6	2,309	..	2,315	..	..	91	..
Salem	..	..	..	1,900	..	1,900	..	1,420	582	..
Trichinopoly	..	..	..	..	..	..	41,276	..	..	..
Tanjore	..	..	..	..	..	..	..	..	..	..
North Coimbatore ..	..	..	..	..	..	..	..	..	9	..
South do. ..	27,055	3,133	1,414	21,914	..	53,516	33,950	..	..	108
Madura	..	..	..	..	..	..	9,318	..	..	..
Tinnevelly	..	..	..	3,391	..	3,391	..	85	..	69
North Malabar	..	..	..	..	..	..	..	..	..	..
South do.	33,635	..	..	..	..	33,635	4,774	20,893	..	186
South Canara	285	248	..	5,796	..	6,329	..	..	..	..
Total received from forests into the sale depôts during the year	60,975	3,381	1,420	35,310	..	101,086	108,896	22,398	682	363
Receipts from one sale depôt into another ..	348	..	..	903	..	1,251	3,243	..	91	..
Quantity found in depôts in excess of original measurement in the forests	3	..	..	6	..	9	18	..	97	31
Total receipts including previous year's stock ..	88,568	3,686	1,420	38,373	25,575	157,622	121,263	27,098	2,771	413
Sold from depôts	50,725	3,217	1,330	18,386	..	73,658	70,561	27,065	2,005	389
Removed from one sale depôt into another ..	* 3,591	..	..	903	..	4,494	..	..	91	..
Quantity used departmentally, wastage, written off	1,768	..	..	124	..	1,892	2,212	33	7	15
Total ..	56,084	3,217	1,330	19,413	..	80,044	72,773	27,098	2,103	404
Balance at the end of the year	32,484	469	90	18,960	25,575	77,578	48,490	..	668	9

* Includes 3,243 cubic feet of timber treated as firewood.

ANNUAL FORM No. 71.

Forest Department, Madras, Southern Circle.

SALES of timber and other produce cut and collected by Government Agency during the year 1890–91.

District.	TIMBER.								TOTAL TIMBER.			
	Teak.		Rosewood.		Vengai.		Other timbers.		From depôt.		From forest.	
	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	Quantity.	Amount.	Quantity.	Amount.
1	2	3	4	5	6	7	8	9	10	11	12	13
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	RS.	C. FT.	RS.
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	..	4,093	..	..	4,093	2,179
South do.	..	..	..	..	6	..	2,042	831	2,048	1,843	831	181
Salem	..	..	..	..	..	..	1,801	...	1,801	1,472	..	..
Trichinopoly	..	..	..	..	..	..	653	..	653	30	..	..
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..
South do.	25,119	1,177	3,085	172	1,324	885	7,646	9,558	37,254	38,638	11,792	5,130
Madura	..	605	..	778	..	1,583	..	552	..	..	3,518	3,375
Tinnevelly	..	2,220	..	..	..	..	3,022	1,716	3,022	3,312	3,936	2,778
North Malabar	..	44,846	..	517	..	856	..	..	..	..	46,219	18,911
South do.	25,267	207	..	2,814	..	30	..	26,509	25,267	29,489	29,560	10,780
South Canara	259	32	132	142	..	..	3,222	991	3,613	2,562	1,165	284
— Total ..	50,725	49,087	3,217	4,423	1,330	3,354	18,386	44,250	73,658	77,346	101,114	43,618

Sales of timber and other produce cut and collected by Government Agency during the year 1890–91—*cont.*

District.	Fuel.				Bamboos.				Sandalwood.				Minor produce.			
	From depôt.		From forest,		From depôt,		From forest,		From depôt.		From forest.		From depot.		From forest.	
	Quantity.	Amount.	Quantity.	Amount.	Quantity	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	C. FT.	RS.	C. FT.	RS.	NO.	RS.	NO.	RS.	C. FT.	RS.	C. FT.	RS.	MDS.	RS.	MDS.	RS.
Chingleput	..	..	7,546	689	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	8,862	1,452	278,356	30,981	..	..	1,883	50	1,184	8,345	..	..	..	..	..	..
South do.	..	..	74,809	7,338	..	..	..	..	..	..	..	..	..	..	..	..
Salem	..	..	..	..	1,420	62	..	..	821	5,486	..	..	..	..	..	..
Trichinopoly	38,220	4,306	152,942	9,361	..	..	..	..	..	..	..	..	..	..	..	..
Tanjore	..	..	1,160	109	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore	..	..	..	..	..	..	..	..	..	..	694	5,209	..	..	..	..
South do.	7,814	808	11,823	180	..	..	..	..	..	..	..	..	108	965	2,023	10,297
Madura	6,757	1,088	47,393	3,473	..	..	11,000	1,036	..	..	..	..	..	..	..	..
Tinnevelly	..	..	166,799	5,256	52	2	61	31	..	..	..	..	69	577	27	189
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	179
South do.	8,908	701	..	..	25,593	1,877	170	8	..	..	..	..	212	566	..	42
South Canara	..	..	16,107	1,699	..	..	250	3	..	..	..	..	..	..	20,279	41,547
Total ..	70,561	8,355	756,935	59,086	27,065	1,941	13,364	1,128	2,005	13,831	694	5,209	389	2,108	22,360	52,254

	Quantity sold.			Amount of sales.			Amount actually realized.
	From depôt.	From forest.	Total.	From depôt.	From forest.	Total.	
				RS.	RS.	RS.	RS.
I (*a*) Timber .. .. C. ft.	73,658	101,114	174,772	77,346	43,618	1,20,964	1,18,617
(*b*) Fuel .. .. ,,	70,561	756,935	827,496	8,355	59,086	67,441	62,397
(*c*) Bamboos .. .. .. No.	27,065	13,364	40,429	1,941	1,128	3,069	3,078
(*d*) Sandalwood .. .. .. C. ft.	2,005	694	2,699	13,831	5,209	19,040	16,925
(*e*) Minor produce .. .. .. Mds.	389	22,360	22,749	2,108	52,254	54,362	55,032
Grand Total of sales during the year both from forests and depôts						2,64,876	2,56,049
Add outstandings due from previous year as per form No.66..						4,635	
Total ..						2,69,511	
Deduct amount of outstandings written off						75	
Do. realized during the year as per form No. 64..						2,56,049	
Balance outstanding on 31st March 1891 ..						13,387	

Annual Form No. 72-A.

Forest Department, Madras, Southern Circle.

Timber and other Produce cut, collected and removed by consumers or purchasers during 1890–91.

District.	Timber.	Firewood and charcoal.	Bamboos.	Money value of sales.											
				Timber.		Firewood.		Bamboos.		Grazing and fodder grass.		Minor produce.		Total.	
				Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.
	C. FEET.	C. FEET.	NO.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Chingleput	35,991	118,867	3,661	3,133	3,133	6,325	6,325	227	227	2,337	2,337	18,985	18,985	31,007	31,007
North Arcot	176,406	477,666	2,332,760	28,043	28,134	39,763	39,757	27,876	27,876	7,885	7,885	52,060	52,060	1,55,627	1,55,712
South do.	57,684	565,093	10,956	7,440	7,440	12,936	12,936	6,106	6,106	4,829	4,829	32,098	32,098	63,409	63,409
Salem	343,841	951,948	1,877,000	26,131	26,131	32,419	32,406	27,307	27,864	14,081	14,096	43,127	43,904	1,43,065	1,44,401
Trichinopoly	231,687	199,938	527,866	15,134	15,188	13,980	13,980	4,094	4,094	6,567	6,515	26,380	26,313	66,155	66,090
Tanjore	9,397	124,349	18,605	644	644	3,307	3,669	76	116	576	576	3,800	3,806	8,403	8,811
North Coimbatore ..	87,361	375,146	1,131,500	9,781	9,781	8,061	8,061	15,738	15,738	20,694	20,694	41,885	41,992	96,159	96,266
South do. ..	60,301	1,051,788	..	8,119	8,113	13,755	13,755	6,744	6,744	8,083	8,083	8,241	8,241	44,942	44,936
Madura	344,800	224,651	..	20,292	19,553	5,597	5,597	2,426	2,426	2,319	2,319	24,774	24,795	55,408	54,690
Tinnevelly	28,856	1,280,322	..	6,956	6,974	41,943	42,026	570	570	1,179	838	16,873	16,647	67,521	67,055
North Malabar	24,188	32	25,609	6,282	6,282	3	3	389	389	447	447	1,251	1,146	8,372	8,267
South do.	60,398	222,878	54,528	5,767	5,767	4,748	4,748	569	569	126	126	71	71	11,281	11,281
South Canara	8,932	251,525	61,896	1,621	1,621	4,151	4,151	888	888	..	..	3,700	1,627	10,360	8,287
Total ..	1,469,842	5,844,203	6,044,381	1,39,343	1,38,761	1,86,988	1,87,414	93,010	93,607	69,123	68,745	2,73,245	2,71,685	7,61,709	7,60,212
Add outstanding due from previous year as per Form No. 66														9,866	
Total ..														7,71,575	
Deduct amount of outstanding written off, &c.														1,481	
Do. amount realized during the year as per Form No. 64														7,60,212	
Balance outstanding on 31st March 1891 as per Form No. 66														9,882	

ANNUAL FORM No. 72-B.

Forest Department, Madras, Southern Circle.

TIMBER and other Produce confiscated and sold during the year 1890–91.

District.	TIMBER.		FIREWOOD.		BAMBOOS.		Minor produce in value.	Total amount of sales.	Amount actually realized.
	Quantity in cubic feet.	Amount of sales.	Quantity in cubic feet.	Amount of sales.	Number.	Amount of sales.			
		RS.		RS.		RS.	RS.	RS.	RS.
Chingleput	5	1	776	24	..	..	..	25	22
North Arcot ..	1,183	637	2,311	281	5,005	163	43	1,124	1,124
South do. ..	845	55	1,538	67	20	1	41	164	164
Salem	2,205	259	848	75	14,134	150	233	717	717
Trichinopoly ..	441	55	151	10	660	8	15	88	88
Tanjore	..	..	20	1	..	..	2	3	3
North Coimbatore ..	4,333	818	..	..	570	5	..	823	823
South do. ..	1,540	196	1,367	43	420	2	77	318	318
Madura	544	56	169	9	340	10	11	86	86
Tinnevelly	863	619	2,593	123	664	33	4	779	779
North Malabar ..	347	21	..	..	..	..	..	21	21
South do. ..	59	12	53	1	40	3	21	37	37
South Canara ..	1,921	220	194	16	225	1	..	237	237
Total ..	14,286	2,949	10,020	650	22,078	376	447	4,422	4,419

ANNUAL FORM No. 73-A.

Forest Department, Madras, Southern Circle.

ABSTRACT showing the value of timber and other produce at sale depôts for the year 1890–91.

District.	Description of timber or produce.	ON HAND AT COMMENCEMENT OF THE YEAR.			ON HAND AT END OF THE YEAR.			DIFFERENCE IN VALUE.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.
				RS.			RS.	RS.	RS.
Chingleput ..	....	..	..	..	..	..	..	..	..
North Arcot ..	Redwood roots and stumps.	Tons. lb. 511 1,120	25,575	7,672	Tons. lb. 511 1,120	25,575	7,672	..	..
	Babul and casuarina wood.	10 537	410	20	166 1,331	11,144	551	531	..
	Sandalwood and roots ..	22 617	1,114	1,782	..	..	..	..	1,782
	Total ..	544 34	27,099	9,474	678 211	36,719	8,223	..	1,251
South Arcot ..	Miscellaneous timber ..	No. 1	2·4	1	70	268·76	178	177	..
	Sandalwood roots and billets.	lb. 0 144	4	13	Ton. lbs. 1 1,984	94	377	364	..
	Total ..	0 144 / No. 1	6·4	14	1 1,984 / No. 70	362·76	555	541	..
Salem	Sandalwood	Mds. lb. 1,449 24½	783	5,382 8 3	Mds. lb. 1,011 30	565	4,172 6 0	..	1,210
	Other timbers	..	..	..	No. 11	99	99 0 0	99	..
	Total ..	Mds. lb. 1,449 24½	783	5,382 8 3	Mds. lb. 1,011 30 / No. 11	664	4,271 6 0	..	1,111

Abstract showing the value of timber and other produce at sale depôts for the year 1890–91—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	Infavour of the year.	Against the year.
				Rs.			Rs.	Rs.	Rs.
Trichinopoly	Miscellaneous timber ..	653	..	81	..	..	..	..	81
	Firewood	..	1,112	95	..	4,168	395	300	..
	Total ..	No. 653	1,112	176	..	4,168	395	219	..
Tanjore ..	.... ..	..	..	..	..	..	..	..	..
North Coimbatore.	Sandalwood billet and roots.	..	..	..	..	9	45	45	..
	Total ..	..	..	..	..	9	45	45	..
South Coimbatore.	Teak	501	12,295	9,493	385	c. ft. 12,437	9,415	..	78
	Rosewood	14	305	184	5	353	265	81	..
	Vengai	..	..	..	1	90	74	74	..
	Miscellaneous timber ..	9	265	151	505	14,539	6,719	6,568	..
	Firewood	..	..	..	Tons. lb. 384 838	26,136	3,072	3,072	..
	Other minor produce ..	..	..	..	2	lb. $3\frac{13}{24}$	6	6	..
	Total ..	524	12,865	9,828	898 and Tons. lb. 384 838	53,555 and lb. $3\frac{13}{24}$	19,551	9,723	..
Madura ..	Firewood	..	6,693·08	750	..	6,970	780	30	..
	Do. (charcoal) ..	..	..	..	..	72	..	..	..
	Total ..	..	6,693·08	750	..	7,042	780	30	..
Tinnevelly ..	Miscellaneous timber ..	..	..	..	63	245	184	184	..
	Minor produce	lb. 24	..	4	12	lb. 13	3	..	1
	Total ..	lb. 24	..	4	75	c. ft. 245 and lb. 13	187	183	..
North Malabar.	.... ..	..	..	..	..	..	..	..	..
South Malabar.	Miscellaneous timber ..	30	1,234	770	30	1,234	770	..	..
	Teak	22,619	14,946	18,000	22,788	20,021	19,000	1,000	..
	Karyas	340	891	10	209	..	6	..	4
	Bamboos	4,700	..	300	..	..	..	..	300
	Minor produce	lb. 450 = Mds. 18	..	200	lb. Mds. 199¼ = 8	..	7	..	193
	Total ..	No. 5,040 / 22,649 Mds. 18	16,180 and 891	19,280	22,818 No. 209 and Mds. 8	21,255	19,783	503	..
South Canara ..	Teak	..	..	..	2	26	42	42	..
	Rosewood	..	..	..	4	116	131	131	..
	Miscellaneous timber ..	..	..	..	415	2,574	2,517	2,517	..
	Total ..	..	..	..	421	2,716	2,690	2,690	..

Abstract showing the value of timber and other produce at sale depôts for the year 1890–91—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	GRAND TOTAL.								
				Rs.			Rs.	Rs.	Rs.
	Teak	501	12,295	9,493	387	12,463	9,457	..	36
	Do. saplings	22,619	14,947	18,000	22,788	20,021	19,000	1,000	..
	Vengai	..	..	..	1	90	74	74	..
	Rosewood	14	305	184	9	469	396	212	..
		Tons. lb.			Tons. lb.				
	Redwood	511 1,120	25,575	7,672	511 1,120	25,575	7,672	..	..
	Miscellaneous timber ..	40 No. 653	1,501·4 + 653	1,003	1,094	18,959·76	10,467	9,464	..
	Firewood	..	8,215	865	..	48,490	4,788	3,923	..
		No.							
	Do.	340	891	10	209	..	6	..	4
	Bamboos	5,040	..	310	..	..	..	..	300
	Rectification	— 340	..	— 10	..	..	..	..	..
	Sandalwood	..	1,901	7,177	..	668	4,594	..	2,583
		Mds. lb.			Mds.				
	Minor produce	18 24	..	204	9	..	16	..	188
		..	..	44,918 — 10	..	..	56,480	11,562	..

Annual Form No. 73-B.

Forest Department, Madras, Southern Circle.

Abstract showing the value of Live-stock, Stores, Tools and Plant for the year 1890–91.

District.	Surveying, &c., Instruments.				Tools.				Machinery.				Furniture.			
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Chingleput	19	329	20	334	202	483	222	510	..	..	..	..	40	395	42	430
North Arcot	34	784	34	740	826 cwt. 32·94	1,946	939 cwt. 32·94	2,431	2	(a) 9,398	2	(a) 9,161	79	424	103	500
South Arcot	67	1,274	73	1,274	549	316	703	434	7	271	7	271	187	1,513	206	1,592
Salem	52	604	52	604	270	1,184	271	1,214	..	..	..	..	17	128	19	136
Trichinopoly	8	407	9	412	983	1,136	1,011	1,161	..	..	..	..	61	480	67	529
Tanjore	21	..	21	..	175	16	210	16	..	..	..	..	20	..	20	..
North Coimbatore	18	82	25	82	846	1,092	903	1,092	..	..	..	..	259	190	273	199
South Coimbatore	51	59	46	59	534	..	531	..	..	42,447	..	42,447	242	49	239	49
Madura	23	491	24	737	214	634	288	4,272	..	..	..	..	127	530	128	603
Tinnevelly	33	755	37	772	324	562	421	695	..	..	..	..	284	1,483	285	1,516
North Malabar	33	407	13	340	38	206	44	159	..	..	..	..	4	26	4	26
South Malabar	10	322	10	322	713	452	734	460	17	105	17	106	37	149	37	149
South Canara	36	..	36	..	371	..	435	785	1	..	..	..	103	..	106	603
Total ..	405	5,514	400	5,676	6,045 cwt. 32·94	8,027	6,712 cwt. 32·94	13,229	27	52,221	26	51,985	1,460	5,367	1,529	6,332

(a) Includes cost of tram materials, old and new.

Abstract showing the value of Live-stock, Stores, Tools and Plant for the year 1890–91—*cont.*

District.	Buildings.				Live-stock.				Miscellaneous.				Total.					
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		Difference in value.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.
Chingleput	4	608	4	883	..	..	..	..	..	..	..	..	265	1,815	288	2,157	342	..
North Arcot	40	3,340	38	3,173	..	..	..	..	..	..	6	45	981 cwt. 32·94	15,892	1,122 cwt. 33·94	16,050	158	..
South Arcot	10	4,301	12	4,097	..	..	..	..	433	1,370	422	1,348	1,253	9,045	1,423	9,016	..	29
Salem	3	75	3	75	..	..	..	..	7	28	7	28	349	2,019	352	2,057	38	..
Trichinopoly	9	1,585	10	2,062	4	172	..	..	220	460	218	371	1,285	4,240	1,315	4,535	295	..
Tanjore	4	322	5	326	..	..	..	..	21	17	22	77	241	355	278	419	64	..
North Coimbatore ..	33	3,520	42	7,746	..	..	..	..	..	..	..	..	1,156	4,884	1,243	9,119	4,235	..
South Coimbatore ..	36	157	21	157	(*b*) 5	7,700	6	7,700	81	..	47	..	949	50,412	890	50,412	..	..
Madura	86	10,093	91	13,616	6	120	6	135	..	..	..	..	456	11,868	537	19,363	7,495	..
Tinnevelly	77	9,575	77	9,575	..	..	..	..	..	..	..	..	718	12,375	820	12,558	183	..
North Malabar ..	8	1,567	8	1,567	4	6,100	7	7,000	27	220	45	331	114	8,526	121	9,423	897	..
South Malabar ..	22	14,290	24	14,350	8	6,702	16	17,202	156	923	165	950	963	22,943	1,003	33,539	10,596	..
South Canara ..	20	170	20	170	..	..	..	..	207	..	236	..	738	170	833	1,558	1,388	..
Total ..	352	49,603	355	57,797	27	20,794	35	32,037	1,152	3,018	1,168	3,150	9,468 cwt. 32·94	1,44,544	10,225	1,70,206	25,662	..

(*b*) One not valued.

ANNUAL FORM No. 74.

Forest Department, Madras.

STATEMENT of Elephants in the Southern Circle during the year 1890–91.

PART I.

Elephants in possession of the reporting officers throughout the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly Keep including servants and food.				Remarks
				Rs.	A.	P.	
	Elephants.						
South Coimbatore.	1. Sankara	28th June 1888. Arrived from North Malabar.	Per head ..	77	14	2	
	2. Chloe						
	3. Parvathi	August 1890. Arrived from South Malabar.					
	4. Karthiyayani						
	5. Rani	Purchased in May 1889 in South Malabar.					
North Malabar ..	1. Phyllis	Purchased in January 1878.	Do. ..	36	0	0	
	2. Lakshmi	Transferred from Anaimalai in May 1881.					
	3. Peri	Captured in April 1889 ..					
	4. Kalyani	Purchased from Mr. Sanderson, Superintendent of Keddas, Mysore, in October 1889.					
South Malabar ..	1. Vixen	Transferred from Wynaad in 1882.	Do. ..	28	3	9	
	2. Peyru	Do. do. ..					
	3. Sampson	Purchased from Mr. Morgan in 1884.					
	4. Eva	Do. do. ..					
	5. Juno	Captured in February 1886.					
	6. Jupiter	Do. in July 1887.					
	7. Thebau	Do. in January 1886.					
	8. Mars	Do. in July 1887.					
	9. Rani	Captured in North Malabar in June 1889.					
	10. Maharaj	Captured in 1886-87 ..					
	11. Jembu	Do. do. ..					
	12. Gordon	Do. on 11th February 1889.					
	13. Jessy	Do. in January 1890 ..					
	14. Eddy	Do. in February do. ..					
	15. Mary	Do. in March 1890 ..					
	Other Cattle.						
Trichinopoly ..	....	....	..	..			
Madura ..	1. Two Kodaikánal bulls.	Purchased in 1885 ..	Per head ..	14	1	7	
	2. Two Navinipatti bulls.	Do. in 1886 ..					
	3. One bull for Gundanshola Depôt.	Do. in 1889 ..					
North Malabar ..	....	....	..	..			

PART II.

Elephants received in the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of Keep including servants and food.		Remarks.
	Elephants.			RS. A. P.	
South Coimbatore.	One calf	Caught	..	..	
North Malabar ..	Not named	Captured in the Government pitfalls in March 1891.			
South Malabar ..	1 Loo	Captured on 2nd April 1890.	Per head.	15 0 0	
	2 Hercules	Do. on 24th December 1890.			
	Other Cattle.				
Trichinopoly ..	....	....	..	..	
Madura	A bull for Gundanshola Depôt.	Obtained by way of exchange for another bull given in lieu giving Rs. 15 extra.	..	14 1 7	
North Malabar ..	2 Bullocks	Purchased in May 1890 ..	Per head.	7 10 9	

PART III.

Elephants gone off the list during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of Keep including servants and food.		How disposed of.
	Elephants.			RS. A. P.	
South Coimbatore.	....	*Nil.*	..	..	
North Malabar ..	Lallameah	Captured in pitfalls in March 1889.	..	37 9 0	Ran away on the 23rd November 1890.
South Malabar ..	Elizabeth	Captured on the 10th January 1890.	..	30 7 6	Died on the 23rd November 1890.
	Other cattle.				
Trichinopoly ..	4 Bullocks	April 1886 and March 1889.	Per head ..	6 12 4	Sold for Rs. 178-8-0 in April 1890.
Madura	The other bull from Gundanshola Depôt.	December 1889	..	14 1 7	Given in exchange for another bull received in lieu.
North Malabar ..	....	....	..	..	

OFFICE OF CONSERVATOR OF FORESTS, N.C.
MADRAS, 4th August 1891.

From

E. D. M. HOOPER, Esq.,

Acting Conservator of Forests, Northern Circle,

To

THE SECRETARY TO THE COMMISSIONERS OF LAND REVENUE.

SIR,

I have the honour to submit the Annual Administration Report of the Forests of the Northern Circle of the Madras Presidency for the year ending 31st March 1891, with the prescribed forms.

2. Having only assumed charge of the Circle three months subsequent to the period under report, I would crave the indulgence of Government for any shortcomings in the report which has been prepared in a very short time and with considerable difficulty on account of the vagueness of the information and inaccuracy of the figures reported to this office.

I have the honour to be,
Sir,
Your most obedient servant,

(Signed) E. D. M. HOOPER,
Acting Conservator of Forests, N.C.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE NORTHERN CIRCLE, MADRAS,

FOR THE YEAR 1890-91.

CHAPTER I.

Introductory Remarks.

Mr. A. W. Peet, Acting Conservator of Forests, was in charge of the Circle for nearly the whole year. He took charge on the 1st April 1890 from Mr. J. S. Gamble, Conservator of Forests, on the latter proceeding to Europe on leave, and handed over to Mr. J. W. Cherry, Acting Conservator on the 25th March 1891.

2. Mr. Peet visited all the districts except Ganjam and Vizagapatam and spent 110 days in inspecting forests and District Forest offices besides 100 days on the Nilgiris.

Mr. Peet inspected also the District Forest offices of Kurnool, Bellary and Anantapur, and his reports thereon were duly communicated to the Collectors and the Examiner of Forest Accounts.

3. The District Forest offices of Kistna, Cuddapah, Bellary, and Anantapur were inspected by the Deputy Collectors of those districts and reports were recorded in—

(1) Board's Proceedings, dated 16th March 1891, Forest No. 233, Mis.
(2) ,, ,, ,, 18th April ,, ,, ,, 338 ,,
(3) ,, ,, ,, 16th March ,, ,, ,, 235 ,,
(4) ,, ,, ,, 16th June ,, ,, ,, 509 ,,

4. The following statement shows the time spent in camp by the District Forest-officers :—

Abstract A.—Distribution and Movements of Officers.

Districts.	Names of officers in charge.	Number of days in charge.	Number of days in camp.	Percentage of days in camp.	Reasons for absence of permanent officer.
Ganjam	Mr. A. W. Lushington, Deputy Conservator.	221	106	29	Transferred to Godávari.
	Mr. J. S. Battic, Assistant Conservator.	144	113	78	
Vizagapatam ..	Mr. C. D. A. McArthy, Assistant Conservator.	365	215	59	
Godávari ..	Mr. J. S. Battie, Assistant Conservator.	214	84	39	Transferred to Ganjam.
	M.R.Ry. K. Subbarayadu, Deputy Collector.	16	..	..	
	Mr. A. W. Lushington, Deputy Conservator.	64	11	17	On furlough from 30th January 1891.
	M.R.Ry. K. Subbarayadu, Deputy Collector.	46	..	..	
	Mr. E. D. M. Hooper, Deputy Conservator.	25	17	68	
Kistna	M.R.Ry. V. Alwar Chetty, Sub-Assistant Conservator.	334	249	75	Privilege leave for one month from 11th October 1890.
	Mr. W. E. Hall, Assistant Collector.	31	..	..	
Nellore	Mr. J. H. B. Brougham, Deputy Conservator.	365	102	28	
Cuddapah ..	Mr. F. A. Lodge, Assistant Conservator.	365	258	71	

ABSTRACT A.—Distribution and movements of officers—*cont.*

Districts.	Names of officers in charge.	Number of days in charge.	Number of days in camp.	Percentage of days in camp.	Reasons for absence of permanent officer.
Kurnool	Mr. G. Homfray, Assistant Conservator.	32	5	16	Officiating as Examiner of Forest Accounts.
	Mr. H. H. Ward, Sub-Assistant Conservator.	156	66	42	
	Mr. P. M. Luhsington, Assistant Conservator.	177	92	52	
Bellary	Mr. P. M. Lushington, Assistant Conservator.	180	72	40	Transferred to Kurnool.
	Mr. E. D. M. Hooper, Deputy Conservator.	152	45	30	Transferred to Godávari.
	Mr. A. B. Jackson, Assistant Conservator.	33	17	51	
Anantapur .	M.R.Ry. T. M. Nallasawmy Naidu, Sub-Assistant Conservator.	350	200	57	Privilege leave for fifteen days from 22nd July 1890.
	M.R.Ry. B. Teperumal Chetty, Deputy Collector.	15	..	..	
Nílgiris	Mr. T. Sheffield, Deputy Conservator.	297	230	77	Transferred to Coimbatore, North.
	Mr. R. W. Morgan, Deputy Conservator.	68	34	50	

CHAPTER II.

AREAS AND BOUNDARIES.

5. *Reserved Forests.*—Form 59-A gives the names and areas of the forests finally reserved under section 16 of the Forest Act. According to the previous year's report, the grand total for the whole circle on the 1st April 1890 was 826 square miles, but it should have been returned at 825 square miles. The mistake occurred in recording 54½ instead of 53½ square miles as equivalent to 34,258 acres in Nellore. There was also a slight difference of half a square mile under Godávari and Anantapur. These errors arose from the system of showing approximate area in square miles against each block instead of against the district total only, as now done.

It will also be observed that in this year a deduction of 10 square miles is shown against Vizagapatam as the result of a revised estimate; this correction should have appeared in the report for 1888–89, in accordance with Board's Proceedings, dated 31st January 1889, Forest No. 53, which is now complied with.

It is satisfactory to report that, during the year, blocks, covering a total area of 1,024 square miles, have been brought under reservation under section 16 of the Act. Thus the aggregate area on the 31st March 1891 is 1,839 square miles as will be seen from the following statement:—

District.	Area on 1st April 1890.	Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.	—
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	
Ganjam	18	67	..	85	
Vizagapatam	14	..	* 10	4	* Revised estimate of area.
Godávari	† 103	242	..	345	† Last year it was 103½.
Kistna	69	277	..	346	
Nellore	‡ 53½	115	..	168½	‡ Last year it was 54½.
Cuddapah	351	5	..	356	
Kurnool	..	242	..	242	
Bellary	3	74	..	77	
Anantapur	§ 14	..	..	14	§ Last year it was 13½.
Nílgiris	199½	2	..	201½	
Total ..	825	1,024	10	1,839	

6. *Form* 59-*B*—gives the names and areas of forests reserved under orders issued prior to the Forest Act, and which have not been added to since. They now exist only in the Cuddapah district and are the same as reported last year. Their total area is 12½ square miles.

7. *Form* 59-*C*—gives the names and areas of reserved lands. The list is a long one but the return must be maintained pending the final settlement of the blocks

proposed when they will be transferred to Form 59-A. The total area on the 1st April 1890 was 6,671 square miles, to which 214 square miles have been added by revision of estimated area and 77½ by the inclusion of fresh blocks, while 1,024 square miles have been transferred to Form 59-A and 66½ square miles were excluded by revision of estimated area or at the settlement. As in Form 59-A, slight alterations have been made in the totals of districts under square miles to make them agree with the totals under acres columns. This is best seen from the following abstract :—

District.	Area on 1st April 1890.	Added during the year.		Transferred to Form 59-A.	Excluded at settlement or on revised estimate of area.	Area on 31st March 1891.	Remarks.
		Fresh blocks.	Revised estimate of area.				
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	
Ganjam	527½	2½	..	67	..	463	
Vizagapatam	10	..	..	..	..	10	
Godávari	917½	33	1	242	..	709½	
Kistna	615½	24	3½	277	25	341	
Nellore	544	..	3	115	5	427	
Cuddapah	1,668	..	..	5	..	1,663	
Kurnool	1,715	..	201	242	31½	1,642½	
Bellary	315	1½	5½	74	5	243	
	62½	..	..	..	..	62½	Leased forest.
Anantapur	262½	½	..	..	..	263	
Nílgiris	96	16	..	2	..	110	
	73	..	..	..	..	73	Leased forest.
Total ..	6,671	77½	214	† 1,024	66½	5,872	
	135½	..	..	..	..	135½	Leased forest.

The leased forests in Bellary and Nílgiris, which were shown hitherto under a separate Form 59-D, have been included this year under reserved lands as per G.O., No. 536, dated 10th July 1890.

8. *Form No.* 59-*D*—gives the names and areas of other forests. They are practically lands reserved under orders of the Collector and exist only in Vizagapatam. Their total area is 23 square miles, as returned in Form 59-E last year.

9. The following abstract gives the changes in different classes of forests as required by the Government of India :—

ABSTRACT B.—Classes of Forests.

Class of forest.	Area on 1st April 1890.	Added during the year.	Excluded during the year.	Difference.	Area on 31st March 1891.	Source or cause of increase or decrease.
	SQ. MILES.	SQ. MILES.	SQ. MILES.	SQ. MILES.	SQ. MILES.	
A. Reserved Forest under Act V.	* 825	1,024	10	+ 1,014	1,839	1,024 square miles were transferred from C. 10 square miles were excluded as per orders in Board's Proceedings, dated 31st January 1889, No. 53.
B. Under previous orders ..	12½	..	..	..	12½	
C. Reserved lands	6,671	(*a*) 291½	(*b*) 1,090½	— 799	5,872	(*a*) Of this, 77½ square miles have been newly added during the year and 214 square miles represent addition due to revised estimate of area.
Leased forests	135½	..	..	..	135½	(*b*) Of this, 1,024 square miles were transferred to A and 66½ square miles excluded partly at settlement and partly by revision of estimated area.
D. Other forests	23	..	..	..	23	This is the area of certain special reserves in Vizagapatam and is the figure returned last year. It does not include the unreserved lands under the Forest Act, the total area of which is 17,951 square miles calculated from statement A of Board's Proceedings, dated 10th December 1890, No. 387.
Total ..	7,667	1,315½	1,100½	+ 215	7,882	

* This is the correct figure for 826 entered by mistake in the last year's report.

10. The following is a list of reserves proposed and notified under section 4 of the Forest Act during the year. It is here entered in continuation of paragraph 10 of the last year's report :—

List of lands proposed and notified under section 4.

96.	Nilgiris	Pillur slopes ... ... Pakasuramalai ... ... Pillur shola ... ... Kulear ... ... Sutton shola addition ... ... Kolakambe ... ... Taimalai shola ... ... Tudúr shola ... ... Melúr slopes ... ... Osatti ... ... Koderu ... ... Kilúr ... ... Welbeck ... ... Bigulihalla ... ... Yadakad ... ... Nanjanád ... ... Red Hills ... ... Keradmund	Notification No. 156 of 19th March 1890.
97.	Kistna ...	Extension of No. 2, Kottur reserve ...	Notification No. 181 of 22nd April 1890.
98.	Do. ...	Tummurukodu, block No. 2 ... ... Do „ „ 3	Notification No. 212 of 27th May 1890.
99.	Do. ...	Tangeda reserve	Notification No. 226 of 3rd June 1890.
100.	Do. ...	Vedullapalli extension	Notification No. 232 of 4th June 1890.
101.	Do. ...	Koppukonda	Notification No. 289 of 30th June 1890.
102.	Ganjam	Tuluga ... ... Ampolu ... ... Singupuram ... ... Rana ... ... Rahimanpuram ... ... Koderu	Notification No. 304 of 12th July 1890.
103.	Kistna	Lam reserve	Notification No. 359 of 7th August 1890.
104.	Do.	Gollamoodi	Notification No. 366 of 7th August 1890.
105.	Do.	Weld Reserve Block No. I ... ... Do. do. II	Notification No. 373 of 9th August 1890.
106.	Godávari	Papikonda	Notification No. 395 of 29th August 1890.
107.	Kistna	Gopuvanipalem	Notification No. 490 of 6th November 1890.
108.	Bellary	Sunkadakal, East	Notification No. 538 of 8th December 1890.
109.	Kistna	Orr's Tope	Notification No. 8 of 5th January 1891.
110.	Bellary	Mundrigi No. 65 ... ... Vonnahalli	Notification No. 104 of 11th March 1891.

11. The following abstract shows the comparison of forest areas with other areas in the district, the figures for the latter being taken from Board's Proceedings (Revenue Settlement, Land Records and Agriculture), No. 387, of 10th December 1890 :—

ABSTRACT C.—District Areas and Forest Reserves in square miles.

Districts.	Total area of the district.	Area excluding zemindaris, whole inam villages, and feudatory states.	Cultivated area.	Remainders.			Area of reserved forests, reserved lands and leased forests, &c., 59-A to D.	Percentage of column 8 to column 3 (forests compared with Government total area).	Percentage of column 8 to column 7 (forests compared with waste).
				Uncultivated and forest.	Area for which returns are not available.	Total of columns 5 and 6.			
1	2	3	4	5	6	7	8	9	10
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.		
Ganjam	8,369	2,257	578	847	832	1,679	548	24·2	32·6
Vizagapatam ..	16,992	1,855	210	198	1,447	1,645	37	1·9	2·2
Godavari	7,864	3,826	1,489	1,865	472	2,337	1,054½	27·5	45·1
Kistna	8,397	5,481	3,049	2,406	26	2,432	687	12·5	28·2
Nellore	8,765	4,043	1,516	2,513	14	2,527	595½	14·7	23·5
Cuddapah	8,729	7,493	1,983	5,510	..	5,510	2,031½	27·1	36·8
Kurnool	7,769	5,925	1,777	4,148	..	4,148	1,884½	31·8	45·4
Bellary	6,130	4,687	2,371	2,316	..	2,316	382½	8·1	16·4
Anantapur	5,274	4,310	1,705	2,204	401	2,605	277	6·4	10·6
Nilgiris	957	957	324	633	..	633	384½	40·1	60·7
Total ..	79,246	40,834	15,002	22,640	3,192	25,832	7,882	19·3	30·5

12. The following statement gives the reserved forests constituted year after year since 1884–85.

ABSTRACT D.—Reserved Forests in square miles.

District.	During 1884–85.	During 1885–86.	During 1886–87.	During 1887–88.	During 1888–89.	During 1889–90.	During 1890–91.	Total.
Ganjam	..	..	..	8½	9½	..	67	85
Vizagapatam	..	..	..	..	14	..	—10	4
Godavari	..	..	..	..	11	92	242	345
Kistna	..	..	..	13	6	50	277	346
Nellore	..	..	½	37½	3–35	*47½	115	168½
Cuddapah	4	—1½	269½	78	..	1	5	356
Kurnool	..	..	..	..	..	..	242	242
Bellary	..	..	..	..	..	3	74	77
Anantapur	..	6	8	..	..	..	..	14
Nilgiris	3½	90½	94	14	—2½	..	2	201½
Total ..	7½	95	372	151	6	193½	1,024 —10	1,839

*Last year it was wrongly shown as 48½ square miles.
Note.—The *minus* entries are in consequence of revised estimate of areas.

13. *Village forest.*—In Cuddapah it is said that statistics were collected for 300 villages, while in Nilgiris the village forests were, on receipt of orders contained in G.O., dated 13th May 1890, No. 328 Revenue, handed over for village use and control. In other districts practically nothing was done for the District Forest-officers were fully engaged on the important work of demarcation, and settlement. Now as definite orders have been issued in Government Order, dated 29th October 1890, No. 844, the idea of forming the so-called village forests will be given up entirely and the new policy adopted.

The system of treatment for adoption with regard to "kanchas" and "shekhadas" being grazing lands held upon supposed privileged tenure is still under the consideration of the Board of Revenue.

14. *Fuel and fodder reserves.*—Mr. Peet's report printed in Government Order, dated 25th March 1889, No. 228-228-A gives the views of the Collectors on this point. Nothing appears to have been done during this year towards the formation of fuel and fodder reserves. The same difficulty that has stood so long in the way of settling village forests has operated to prevent the formation of fuel and fodder reserves. The

question has now been definitely settled by the Government order above quoted deciding to look upon reserved forest as the natural source for produce of all kinds and to take the place of village and fuel and fodder reserves.

In Nellore, the undermentioned reserves are said to be along the railway line, but no supply is being made from them as the railway requirements are being met from the private forests of Venkatagiri and Kálahasti zemindaris.

1. Kanupur, east.
2. „ west.
3. Survipalle.
4. Gúdúr.
5. Vendodu.
6. Vedicherla.
7. Kadived.
8. Pidatalapudi.
9. Nellaballi.
10. Chillakur.

Under the orders of Government referred to, as deciding finally the extent to which reservation is to be carried, the following estimate was prepared district by district of the probable area still for selection and settlement as forest reserves sufficient to supply the agricultural and general community with domestic and agricultural produce as well as grazing. This is manifestly a rough estimate and subject to correction as settlement develops :—

	Square miles.	
Ganjam	81	*Vide* Board's Proceedings, dated 28th April 1891, Forest No. 175.
Vizagapatam	8	
Godávari	50	
Kistna	150	
Nellore	800	
Cuddapah	1,600	
Kurnool	300	
Bellary	92	
Anantapur	60	
Nílgiris	11	
Total ...	3,152	

Settlement.

15. The following shows the progress of settlement, giving the numbers of blocks and the areas in square miles :—

Abstract E.—Progress of Settlement.

Districts.	Total under settlement on 1st April 1890. — Blocks settled awaiting final notification.		Blocks settlement pending.		Total.		Notified for settlement during the year.		Total.	
1	2		3		4		5		6	
		Sq. mls.		Sq. mls.		Sq. mls.		Sq. mls.		Sq. mls.
Ganjam	18	275½	14	236	32	511½	6	2½	38	514
Vizagapatam	..	..	5	10	5	10	..	..	5	10
Godávari	31	261	39	656½	70	917½ + * 1	1	33	71	951½
Kistna	25	373½	7	242	32	615½ − * 21½	10	24	42	618
Nellore	53	182	33	343	86	525 − * 2	..	..	86	523
Cuddapah	55	1,027	35	460	90	1,487	..	..	90	1,487
Kurnool	..	..	15	1,715	15	1,715 + * 169½	..	..	15	1,884½
Bellary	..	..	59	315	59	315 + * ½	3	1½	62	317
Anantapur	17	120	22	142½	39	262½	1	½	40	263
Nílgiris	56	32	2	64	58	96	18	16	76	112
Total ..	255	2,271	231	4,184	486	6,455 + 147½	39	77½	525	6,680

Districts.	Finally notified during the year under section 16.		Balance on 31st March 1891.					
			Settled awaiting final notification.		Under settlement.		Total.	
	7		8		9		10	
		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Ganjam	5	67	16	249½	17	197½	33	447
Vizagapatam	..	..	..	..	5	10	5	10
Godávari	28	242	11	303	32	406½	43	709½
Kistna	21	277	9	263	12	78	21	341
Nellore	51	115	27	199	8	209	35	408
Cuddapah	1	5	81	1,407	18	75	89	1,482
Kurnool	3	242	9	1,594½	3	48	12	1,642½
Bellary	23	74	13	67	26	176	39	243
Anantapur	..	..	19	128	21	135	40	263
Nilgiris	2	2	55	30	19	80	74	110
Total ..	134	1,024	240	4,241	151	1,415	391	5,656

* Revised estimate of area.

Note.—The number and area of blocks as given in form 59-C have been adopted. In certain districts the difference in the number of blocks between this abstract and the following notes, is due to the clubbing of two or more blocks in some cases before or after settlement.

16. *Ganjam.*—The Collector reports that the progress of forest settlement work in this district was unsatisfactory. It is attributed to there being no Special Forest Settlement-officer and to the want of time on the part of Divisional officers for the work. Inquiry has been held in the case of three reserves and the final settlement report has been submitted during the year. Of the eighteen blocks the settlement of which was practically completed before 1st April 1890, only five have been notified under section 16. The remainder are either under reference from the Board of Revenue to the Collector for further information or with the Board awaiting final notification.

Vizagapatam.—It is reported that the Principal Assistant Collector has visited all the five reserves and inquired into the claims presented, also that the final reports may be shortly expected. The delay is attributed to the employment of the Divisional officer's time on his other duties and partly to his absence from the district during a portion of the year.

Godávari.—In the greater part of the year, the Special Forest Settlement-officer was engaged in the Kurnool and Kistna districts; hence the settlement of only eight reserves covering an area of 181,220 acres is reported to have been completed during the year. The Forest Settlement-officer was also engaged in revising the records of a number of blocks returned by the Board. Twenty-eight blocks covering an area of 154,942 acres have been finally notified under section 16.

Kistna.—The progress in this district was good; twenty-one blocks covering an area of 177,203 acres have been finally notified, nine others were settled and reported on and 12 more are said to be in various stages of settlement. It is also stated that all the reports returned by the Board of Revenue for revision have been retransmitted with the necessary corrections.

Nellore.—The work in this district progressed rapidly; 51 blocks were notified under section 16, and, of the remaining 35, it is reported that there were only 3 reserves, viz., Srîharikot, Vedullacheruvu and Chemakurti pending with the Forest Settlement-officer, 13 with the District Forest-officer for verification and adjudication by the Civil Court and the rest awaiting notification with the Board.

Cuddapah.—Only one reserve, Vandadi Hills, covering an area of 3,390 acres, which was notified for settlement in 1884, has been finally notified under section 16 in this year. On the 1st April 1890, there were no less than 55 blocks settled and the settlement of 27 more was completed and the records of 15 others have been revised and resubmitted to the Board. The delay was caused by the want of maps to illustrate the final reports of the Forest Settlement-officer, and as there are 2 draughtsmen employed in the district it is believed that the work will now be expedited.

Kurnool.—The Special Forest Settlement-officer, Mr. Jagannadha Row Pantulu, was chiefly engaged in this district and completed the settlement of 12 out of 15

blocks notified under section 4. Only 3 of these, viz., Veligondas North, Veligondas South, and Sirvel, covering an area of 242 square miles, have appeared under section 16 and the others were pending final orders of the Board and Government. In the district report it is also stated that the District Forest-officer has selected several areas and that the submission of proposals regarding them was delayed for want of maps which are under preparation.

Bellary.—The work advanced well in this district also : 23 blocks, covering an area of 74 square miles, have been finally notified and the records of 13 others returned by the Board of Revenue have been revised and resubmitted.

Anantapur.—In this district there are 3 Divisional officers besides the Special Forest Settlement-officer who do the forest settlement work and yet the outturn has not been much. No reserve has been finally notified, but it is stated that the settlement of 23 reserves had been completed and final reports submitted for 4.

Nilgiris.—The chief work done in this district was the revision of the records of fifty Paranginad and seven Todanad reserves which had been returned by the Board. Two reserves have been notified under sections 16 and eighteen under section 4 ; of the latter the boundaries of 5 blocks have been inspected by the Forest Settlement-officer. It is explained that it was not possible to do more work as Mr. Cobb, the Forest Settlement-officer, only returned from Tanjore at the end of December 1890 and was employed on census and other duties till February.

17. *Cost of settlement.*—The following shows the cost incurred on account of the Special Forest Settlement-officers and their establishments from 1886–87.

(1) Mr. D. Jagannadha Row, Pantulu Garu (Godávari, Kistna and Kurnool), appointed on 20th October 1886 :—

Year.	Cost.
	RS.
1886-87 ...	7,409
1887-88 ...	9,727
1888-89 ...	9,818
1889-90 ...	10,759
1890-91 ...	10,480
Total ...	48,193

(2) Mr. I. Sarabhalingam Naidu Garu, appointed 14th December 1886, resigned, 9th October 1890.
Mr. Somasundra Shastri appointed, in Notification No. 408, 12th September 1890.
} Forest Settlement-officer, Bellary, Anantapur and Nellore.

Year.	Cost.
	RS.
1886-87 ...	1,622
1887-88 ...	10,760
1888-89 ...	10,109
1889-90 ...	10,301
1890-91 ...	10,095
Total ...	42,887

(3) Mr. McMurray (Cuddapah) appointed 10th February 1890—

Year.	Cost.
	RS.
1890-91 ...	12,074

This has been debited to the Southern Circle where this officer was mostly employed. It is scarcely possible to deduce the cost of settlement work from these figures, for, apart from large areas being practically settled and awaiting notification, it is not known how much has been the work of District officers.

DEMARCATION.

18. The following abstract shows the area demarcated according to the latest returns:—

ABSTRACT F.—Area of Forests demarcated.

Districts.	Area in Square miles.		
	Up to 31st March 1890.	During 1890-91.	Total.
Ganjam	154	..	154
Vizagapatam	14	..	14
Godávari	387	147	534
Kistna	374½	14	388½
Nellore	410½	22½	433
Cuddapah	303½	63½	367
Kurnool	1,714½	..	1,714½
Bellary	242	15¼	257¼
Anantapur	145	69¾	214¾
Nilgiris	290	11	301
Total ..	4,035	343	4,378

19. The following abstract shows the length demarcated during the year, in running miles:—

ABSTRACT G.—Demarcation work done in 1890-91.

District.	Preliminary.			Permanent.			Reclearing old lines.		
	Miles.	Rate.	Cost.	Miles.	Rate.	Cost.	Miles.	Rate.	Cost.
1	2	3	4	5	6	7	8	9	10
		Rs. A. P.	Rs.		Rs. A. P.	Rs. A. P.		Rs. A. P.	Rs. A. P.
Ganjam ..	..	..	..	45	16 0 0	720 0 0	150	11 1 6	1,664 0 0
Vizagapatam ..	..	..	..	..	..	..	16	5 7 9	87 12 0
Godávari ..	47	4 8 10	214	92	12 4 4	1,129 0 0	145	4 15 1	717 0 0
Kistna ..	5	11 6 4	57	70	12 2 3	850 0 0	24	10 13 4	260 0 0
Nellore ..	..	..	..	36	4 14 5	176 6 0	..	..	..
Cuddapah ..	153	0 1 6	14	170	12 1 4	2,054 0 0	15	2 6 5	36 0 0
Kurnool ..	20	1 9 7	32	7	20 14 10	146 8 0	26	3 13 6	100 0 0
Bellary ..	..	..	..	40	2 1 2	83 0 0	..	..	..
Anantapur ..	20	2 15 2	59	299	6 2 7	1,843 0 0	128	3 15 9	510 0 0
							(b) 14	4 1 2	57 0 0
Nilgiris ..	..	..	..	(d) 53	14 6 7	764 0 0	264	7 6 0	1,946 0 0
Total ..	245	..	376	812	..	7,765 14 0	782	..	5,377 12 0

District.	Fencing or ditching.			Marks or posts erected.			Total cost of the district.	Remarks.
	Miles.	Rate.	Cost.	Number.	Rate.	Cost.		
	11	12	13	14	15	16	17	18
		Rs. A. P.	Rs.		Rs. A. P.	Rs. A. P.	Rs. A. P.	
Ganjam ..	..	..	..	342	0 4 11	104 0 0	2,488 0 0	Distances recorded omit fractions of miles.
Vizagapatam ..	..	..	..	..	..	..	87 12 0	It is believed that the difference between the total cost here shown and the audited figures under this head of expenditure is due to the exclusion from this form of charges other than for labour and materials, thereby cost of special establishment is not debited to the various works.
Godávari ..	5	33 6 5	167	419	0 11 4	296 0 0	2,523 0 0	
Kistna ..	..	..	..	459	0 7 0	200 0 0	1,383 0 0	
				(a) 58	0 4 5	16 0 0		
Nellore ..	..	..	..	472	0 4 2	122 8 0	298 14 0	
Cuddapah ..	3	52 0 0	156	1,329	*	*	2,260 0 0	
Kurnool ..	..	..	..	179	†	†	278 8 0	
Bellary ..	..	..	..	583	0 2 0	72 0 0	155 0 0	
Anantapur ..	6	31 8 0	189	1,838	0 3 2	363 0 0	3,172 0 0	
				(c) 744	0 3 1	151 0 0		
Nilgiris ..	..	..	..	5,586	16 1 6 per 100	899 0 0	3,609 0 0	
Total ..	14	..	512	12,039	..	2,223 8 0	16,255 2 0	

(a) Repairing old marks.
(b) Repairing boundary walls.
(c) Repairing cairns and pillars.
(d) Including posts.
* Included in the cost given under permanent demarcation.
† Do. do. preliminary demarcation.

20. *Ganjam.*—The district report states that the work done was not satisfactory as no reserve was completely demarcated with posts, &c. The actual outturn was as follows:—

Nature of work.	Miles.	Cost.	Rate.
		RS.	RS. A. P.
Permanent	45	720	16 0 0
Boundary posts	342	104	0 4 11
Reclearing	150	1,664	11 1 6

Vizagapatam.—Peddapalle reserve boundary, which was cut in 1888-89, was found to be very inaccurate and overgrown in most places. It was consequently redemarcated with a 10-feet line. No marks or posts were put up.

	Miles.	Cost.	Rate.
		RS. A. P.	RS. A. P.
Length	16	87 12 0	5 7 9 per mile.

Godávari.—The report contains no remarks. The following statistics are available:—

	Miles.	Cost.	Rate.
		RS.	RS. A. P.
Preliminary	47	214	4 8 10
Final	92	1,129	12 4 4
Fencing with thorns	5	167	33 6 5
Reclearing	145	717	4 15 1
Posts	No. 419	296	0 11 4

Average cost per mile is Rs. 18, exclusive of fencing and reclearing, this being the same figure as given in last year's return.

Kistna.—Lines running through hilly and jungle tracts were cleared to a width of 10 feet, loose stones were removed and stone cairns 5 feet high were erected. Babul (*Ac. Arabica*) reserves in the Guntúr range were demarcated with stone posts 5 feet high with a broad-arrow mark cut at the head. In Bápatla and Bandar ranges where stone is not available, the reserves have been demarcated with palmyra posts numbered. In Palnád the work has not been satisfactory, but the taluk is too large to be controlled by a range officer who is only a forester on Rs. 20 per mensem. On the whole, much good work has been effected, though the cost for reclearing appears high.

Nellore.—The outturn is less than in the previous year. The district report is again silent as to the details of the work performed, but mentions the fact that range officers were largely employed on work other than demarcation.

Cuddapah.—The district report states that guards and watchers kept lines clear in Kódúr and Rájampet ranges. In other charges the work was performed by the same agency supplemented by hired labourers. Seedlings of *Corypha elata* were put down at 491 angles on the reserve boundaries in the Kódúr range.

The work performed included the following:—

—	Miles.	Cost.	Rate.
		RS.	RS. A. P.
Final demarcation with cairns (1329) ..	170	2,054	12 1 4
Preliminary	153	14	0 1 6
Fencing	3	156	52 0 0
Reclearing	15	36	2 6 5

It is also reported that 76 chains of aloe fence were put down, but the cost was not completely charged off in the accounts of the year under report, while the dryness of the season caused great mortality among the plants which must be replaced in large numbers.

Kurnool.—The work done was as follows:—

Twenty miles in Pattikonda were cleared and posts erected to the number of 179 for Rs. 32. Four miles of boundary and 3 miles of interior lines in the Bairnuti

section of the Nandyál block were cleared for Rs. 146–8–0, also twenty miles of the boundary of the Márkápur block were recleared at the cost of Rs. 100, and it is interesting to record that six miles of boundary in the Veligonda blocks were cut free of charge; apparently in return for permission to remove the produce cut.

More clearing would have been done had an earlier decision been come to as to the reservation of the Terai below the Nallamalais, as the upkeep of the old broad line cut in 1883 will be unnecessary now the boundary is to come well out to the plains.

Bellary.—But little was done. Forty miles of line ten feet wide were cleared in four reserves of the Kúdligi range at a cost of Rs. 83. Stone cairns to the number of 583 were placed around certain reserves in the Bellary taluk at a cost of Rs. 72.

More work would have been done, but for settlement and census work.

Anantapur.—Up to the close of the year 43 blocks, comprising 215 square miles, have been demarcated at a cost of Rs. 6,175. During the year the work done was—

	Rs.	A.	P.	Rs.	A.	P.
Preliminary, 20 miles at	2	15	2	59	0	0
Permanent, 299 miles at	6	2	7	1,843	0	0
Reclearing, 128 miles at	3	15	9	510	0	0
Fencing, 6 miles at	31	8	0	189	0	0
Posts, 2,612 cost		...		514	0	0

This district shows the best outturn of the circle.

Nilgiris.

—	Miles.	Cost.	Rate.
		Rs.	Rs. A. P.
Demarcation including posts	53	764	14 6 7
Posts renewed .. .. No.	5,586	899	16 1 6 per 100
Reclearing	264	1,946	7 6 0

The district report mentions that the original demarcation was not done in a substantial or permanent manner and the lines have to be recleared and fresh posts erected in place of those decayed.

The length of line cleared would have been much greater had the settlement progressed more rapidly. It is becoming more generally recognised that systematic line clearing beyond making a thin line between cairns erected far from each other, where cultivation approaches the proposed line, is unnecessary, until the boundary is fixed after completion of settlement.

Range officers were very much occupied in the details of settlement and this is an additional reason for the outturn of line clearing being so small.

CHAPTER III.

Surveys and Working Plans.

Surveys.

21. *Ganjam.*—The boundaries of the undermentioned blocks with their enclosures have been surveyed departmentally:—

1. Dimrijholi.
2. Gullery.
3. Gogodo.
4. Chodiapalli (partly)
5. Kaliamba (partly).
6. Teliki (,,).
7. Birkot in Darpangia reserve.
8. Balkia in Rambha reserve.

The object of the survey was to illustrate forest settlement work, but it would seem to be a needless enhancement of the cost of settlement to make such surveys when merely proposing blocks for settlement except in disputed tracts, since experience proves that our proposed boundaries are seldom adhered to subsequently. On the other hand, the survey of areas in accordance with finally sanctioned settlement notifications is a matter of considerable importance.

Vizagapatam.—No work has been done with the exception of small surveys of the Pálkonda Agency reserves by the Forest Range-officer.

Godávari.—The final settlement reports have been illustrated by sketch-maps for the most part, but some of the blocks were surveyed by a surveyor temporarily employed.

Kistna.—The survey of the Kondapalli reserve is in progress.

Nellore.—The survey of Sríharikót was taken up at the close of the year to illustrate the final report of the Forest Settlement-officer. Twenty-five and one half miles were surveyed and the work is still being carried on.

Cuddapah.—The only survey work carried out was in block II of Balapalle reserved forest, in which compartment lines were cut to the length of 15 miles.

Kurnool.—A surveyor and draughtsman on Rs. 50 is employed in this district. The outward boundaries of Cumbum, Márkápur, Nandikótkur and South Dhone reserves have been surveyed for the purposes of settlement, and maps of several others were corrected. The surveyor was absent on sick leave for three months, and the compilation of the maps was done in the Conservator's office.

Bellary.—Only one reserve, Boodikonda, was surveyed by a range officer in order to submit a map with the notification proposing it for settlement. The survey work undertaken on account of the Forest Department by the Revenue Survey Department in 1889-90 was continued up to June 1890. The work done was the survey of a series of blocks under settlement in the Adóni and Alúr taluks, and proof maps of some of the reserves were received during the year under report and are being verified.

Anantapur.—Two surveyors were employed departmentally and they surveyed four reserves as follows :—

1. Ramgiri.
2. Chillavaripalle (partly).
3. Jakkalacheruvu.
4. Peddadoddi.

and 16 others which were surveyed are being mapped by the Survey Department.

Nilgiris.—It is reported that no survey was done, there being no special establishment employed for the purpose.

Working Plans and Plans of Operations.

22. *Ganjam.*—No working plans have been formulated for the forests in this district. The plan of operations in force was objected to by Mr. Peet when in charge of the circle, and he put a stop to it because it was wasteful of good timber and caused loss of revenue. He arranged that marketable timber should be removed from unreserved lands and operations in the forest reserves confined to removal of the large quantities of timber now lying felled in them, while working plans should follow after preparing an estimate of standing growth.

Vizagapatam.—Nothing was done. The District Forest-officer was engaged in making fresh selections for reserved forests and was unable to take up the subject.

In the *Godávari* district the changes of the District Forest-officers interfered with the preparation of fresh working plans. A commencement was made towards securing statistics of demand and supply for the different reserves by debiting and crediting expenditure and revenue to the particular forests in the accounts as far as possible. Restriction was imposed on the cutting of immature timber from the reserved forests in Bhadráchalam, which have hitherto been fully cut into to supply the Rajahmandri market.

Kistna.—The District Forest-officer has prepared and sent in plans of operations for all reserves and they are now for consideration.

Nellore.—The District Forest-officer reports that though no working plans have been prepared, fellings are already restricted to fixed areas in the reserved forests and subject to the reservation of trees selected and marked by the range officers. An abnormal number of deaths of casuarina trees interfered with the execution of the arrangements in the plan for working the casuarina plantation. In Sríharikót the plan was adhered to and the yearly cutting made in accordance with its provision.

In *Cuddapah*, the Balapalle felling was carried out in accordance with the working plan, the yield in engine fuel and smaller material being at the rate of 16 tons per acre. A second block is now being opened out and a plan for its working is under preparation, while systematic working is also carried out in various small blocks including the Kódúr red sanders plantation.

From *Kurnool*, it is reported that no working plans have, as yet, been attempted. Difficulties in the way of work in this district are very great from the unhealthiness of its forests and both the District Forest-officer and his Range officers have their time fully occupied by selection and ordinary reserve work at present. The Nallamalais being now finally settled, the work of controlling the timber felling over selected areas will be seriously commenced, while the fuel-cutting along the line of railway in the more accessible forests will be arranged systematically.

Bellary.—The only working plan now in existence is that for improvement thinnings at Sandúr, but this has not been worked up to in the past. The District Forest-officer suggested an alteration and proposed to cut in the Rámandrug range alone and to go over each compartment thoroughly, and this was sanctioned by the Conservator, and cuttings were stopped in the Donemalai range and in the North-eastern ranges. Even then the plan could not be worked up to, as labour is not to be depended upon for departmental fellings, and it is proposed to reconsider the plan of treatment for these leased forests.

Anantapur.—The plan of operations for the Khojjapalle reserve was not fully carried out as the range officer's time was occupied with demarcation and settlement.

Nílgiris.—The District Forest-officer writes:—"Mr. Gamble's inspection note, dated 6th April 1887, contains the working plan of operations for the marginally-noted reserves. Black Bridge has not yet been divided into compartments and the working plan has not been adhered to."

Cairn Hill working circle.	
Aramby	,,
Governor's Shola	,,
Coonoor Peak	,,
Bleak House	,,
Bandy Shola	,,
Black Bridge	,,
Ghât Reserve	,,
Barliyár	,,

"In consequence of the orders of Government contained in Board's Proceedings, dated 7th January 1889, No. 6-F., the working plans framed for the other plantations could not be strictly adhered to. It was impossible to sell the previous year's fellings owing to the minimum price fixed by Government having been too high. To have felled the compartments in accordance with the provisions of the working plans would have entailed the accumulation of an immense stock of fuel which would only have rotted in the forest.

"The accompanying statement marked B shows the yield of each compartment felled during the year. The natural sholas within the settlements of Ootacamund and Coonoor were not worked owing to the orders of Government restricting the working plan of sholas within those settlements, but creepers were cut and "Strobilanthes" and other undergrowth removed from some of them.

"Wattle was thinned out in the Brooklands and Marliamund plantations according to the working plan framed by Mr. Gamble. The thinning in Marliamund was completed during the year under report instead of in 1891-92, as the Municipal Council insisted on its being done on sanitary grounds. The town shola and ghât reserves in the Coonoor Municipality were also thinned for similar reasons, the cost of the work and the revenue realized appear under works of improvement.

"*Plans of operations*.—Paragraph 76 of the Forest Code was not introduced during the year. The Forest Range-officer, Coonoor, has been asked to survey the planted portion of the Black Bridge reserve, and as soon as this is done, a working plan will be framed for this and the Rallia reserve."

23. The foregoing remarks will show that the few working plans prepared are for the most part not being adhered to at present. In some cases they were scarcely suitable and have required amendment in others, the fewness and ignorance of range officers and the all-absorbing work of selection of forests and of forest settlement have prevented the plans being carried out. Nor is it likely that any real start will be made in this direction for the next two years beyond the gathering of statistics and general study of the various forest reserves.

CHAPTER IV.

PROTECTION AND IMPROVEMENT.

(a) ESTABLISHMENT AND RANGES AND BEATS.

24. *Establishment.*—The following abstract shows the sanctioned establishment of the year compared with that of last year :—

—	For the year 1889-90.	For the year 1890-91.	Difference.
Permanent.			
Conservator	1	1	..
Deputy Conservators	4	4	..
Assistant Conservators	7	8	+ 1
Sub-Assistant Conservators	6	6	..
Rangers	24	24	..
Foresters	49	50	+ 1
Forest Guards	348	359	+ 11
Clerks	35	35	..
Peons	96	100	+ 4
Total ..	570	587	+ 17
Temporary.			
Surveyors	8	9	+ 1
Draughtsmen	7	7	..
Foresters	5	11	+ 6
Overseers	1	1	..
Depôt Gumastahs	27	52	+ 25
Watchers	82	253	+ 171
Tannah Peons	268	297	+ 29
Lascars	16	14	— 2
Maistries	5	3	..
Gardeners	105	122	+ 17
Mahouts and Kavadies	14	8	— 6
Boat syrang	3	3	..
Clerks	19	13	— 6
Peons	38	44	+ 6
Total ..	598	837	+ 239

The return shows an increase during the year both in the permanent and temporary staff. This was absolutely necessary for the protection of the forests and in the interests of revenue. Proposals for a large addition to the strength of the establishment are before Government.

The superior staff consisted of—

Name.	Rank.	Date of appointment to service.
A. W. Peet	Acting Conservator	1871
F. D'A. Vincent	Deputy Conservator, II Grade	1874
E. D. M. Hooper	Do. II ,,	1874
J. H. B. Brougham	Do. IV ,,	1864
T. Sheffield	Do. IV ,,	1860
A. W. Lushington	Do. IV ,,	1882
G. Homfray	Assistant Conservator, I ,,	1882
J. S. Battie	Do. I ,,	1879
F. A. Lodge	Do. I ,,	1883
H. T. D. Sweet	Do. II ,,	1884
P. M. Lushington	Do. II ,,	1886
C. D. A. McArthy	Do. III ,,	1888
A. B. Jackson	Do. III ,,	1889
R. McIntosh	Do. III ,,	1891
Sub-Assistant Conservators.		
T. M. Nallasawmy Naidu	Sub-Assistant Conservator, I Grade	1876
V. Alwar Chetty	Do. do. I ,,	1886
T. N. Hearsey	Do. do. II ,,	1887
H. H. Ward	Do. do. II ,,	1881
T. G. A. Goudoin	Do. do. II ,,	1872

Of this staff Mr. Vincent, who had been on leave without pay for over 4 years, resigned his post with effect from the 13th September 1890, and it is not known whether Mr. Sweet, who has also been on leave for over 3 years, will return to the service. Messrs. G. Homfray and A. W. Lushington proceeded on leave to Europe on one year's furlough on medical certificate.

Mr. E. D. M. Hooper, who had been employed in the Southern Circle since 1888, returned on the 27th September 1890 to the Northern Circle.

Mr. R. McIntosh, one of the trained officers from England, was brought on the list of the superior staff in January 1891 and posted to the Cuddapah district as a supernumerary.

25. *Ranges and Beats.*—The scarcity of subordinate officers has again resulted in a large proportion of range charges being held by foresters and this militates against successful administration.

(b) General Protection and Breaches of Forest Law.

26. A comparison between the forest offences reported for each of the past two years is here shown:—

Abstract H.—Forest Offences (Form 63).

Year.	Brought forward from previous year.	Cases added.	Cases disposed of							Balance.
			Cases.	Persons.	Percentage of cases withdrawn.	Percentage of cases compounded.	Amount realized.	Percentage of cases convicted.	Percentage of cases acquitted.	
							Rs.			
1889–90	281	1,355	1,478	3,563	*Nil.*	35	2,744	46	19	* 158
1890–91	145	1,905	1,644	3,885	..	33	5,085	51	16	406

* It is explained by the District Forest-officer, Ganjam, that in this total 13 cases were included by mistake.

The total number of cases increased from 1,355 to 1,905; the percentage of convictions rose from 46 to 51 per cent., taking compounded cases as acquittals. On the other hand taking the percentage of convictions to the number of cases prosecuted it has risen from 70 to 76. The percentage of compounded cases to total cases of the year was 27 per cent. as against 32 per cent. the previous year.

27. *Ganjam.*—The Collector in the Forest report remarks as follows:—

"The great delay on the part of Magistrates in disposing of forest cases is much to be regretted. It has with other cases encouraged the illicit removal of timber from the forests. Steps will be taken to see that all unnecessary delay is avoided in the future."

It is satisfactory to see that the Collector is alive to the necessity for putting a stop to the unsatisfactory delay in the disposal of Forest Magisterial cases, but it is not explained in the body of the report how it came to pass that of the 13 cases tried conviction was obtained in only four cases, but whether this arose from careless prosecution or the non-acceptance of the evidence by Magistrates, it is a serious matter calling for the closest supervision on the part of the Collector and his District Forest-officer, for it means the ruination of forest. It is further reported that the state of forest protection in Goomsur is anything but what it should be.

It is stated also that the entry in last year's annual report of thirteen compounded cases pending was an error, and that there were no cases other than on the files of the Magistrates. It is also remarked that the—

"Wholesale way in which cases have been compounded has had a by no means inconsiderable effect in encouraging illicit removals: the District Forest-officer now only compounds the very petty cases. In Goomsur where the illicit removal of Government timber is a regular trade, a man does not mind paying up; he is very seldom caught and the fine is soon recouped. Whereas a man will generally try to avoid a second conviction. To show that compounding cases has little or no effect in stopping theft, I might state that a man was caught a second time within a fortnight of an offence committed by him having been compounded. He is now in prison, and I am sure if the case had been compounded the effect amongst the surrounding villages would heve been *nil.*"

Vizagapatam.—The return from this district shows the largest number of cases detected and convicted or compounded. One case is mentioned in which the offenders, nine in number, committed an assault on 2 fire patrols and a Forest guard; 8 were fined Rs. 50 each and one sentenced to one month's imprisonment. The offenders are said to be rich men.

Godávari.—The increase in the number of offences occurred in the Bhadráchalam Sub-Division for the most part and were cases of timber cutting in excess of quantities sanctioned in the permits or of felling without sanction. The offenders were the resident timber dealers who supply the Rajahmandri market. These frauds have been dealt with magisterially, and it is anticipated that with the better control now instituted they will be much reduced.

Kistna.—No remark appears called for.

Nellore.—The total number of offences is small. It is satisfactory to note the high percentage of convictions obtained which shows that care has been taken in prosecuting cases and protection has been efficient.

Cuddapah.—The number of forest offences is comparatively large, but the percentage of convictions is high. It is reported that increased protection can only result from the employment of a larger protective staff.

Kurnool.—Conviction was obtained in 117 cases, while in 85 cases the offenders were acquitted. This comparatively large number of acquittals is not remarked on in the District report, but it is probably due to there being no evidence of the actual commission of the offence in the forest, and it being necessary to rely upon a chain of circumstantial evidence which the Magistrates hesitate to accept. This is the only result that can be expected while our patrolling staff is so weak and our range charges so large. It is explained that every opportunity was given to offenders to compound in petty cases when the produce concerned was less than Rs. 20 in value, or of valuable species of timber. A village officer who was authorised to issue licenses is reported to be under trial for fraud and it is mentioned that wood of valuable trees is cut up and removed stealthily at night under cover of head-load permits *for firewood.* Two cases are referred to wherein Chentzus assaulted the Forest guard who detected them in the commission of forest offence, and in one instance the delinquent drew a knife on the guard who arrested him.

In *Bellary* forest offences were few. The chief delinquents were coolies resident of the cantonment who visited the neighbouring hill reserves and stole grass and "*Cassia*" bark. They proceed to the hills in gangs and when detected by the solitary guard promptly decamp and their subsequent identification is difficult. Hence the acquittal of 103 people in 23 cases.

Anantapur.—In 69 cases out of 75 a conviction was obtained which is highly satisfactory.

Nilgiri District.—The District report states—

"The small number of cases prosecuted is not really any indication that the Forest Laws are respected; on the contrary it is a proof of the worthlessness of the establishment maintained, for I have convinced myself by personal inspection that the inhabitants of this district are not more law abiding than those of others. As a matter of fact unauthorized grazing, theft of produce, the firing of forests, &c., is systematically carried out, and nothing but the most drastic punishment will put a stop to it."

28. Remarking generally on the forest offences of the year, it may be said that from the strange differences in the total cases reported in various districts there is room to doubt whether the returning of only few offences is a criterion of the efficiency of the protection afforded to the forests. There is no reason why Vizagapatam should have no less than 620 forest criminals and the adjoining Godávari district only 127. Cuddapah shows 828 persons charged, while Nellore has only 201. There is reason to believe that only a small proportion of the forest offences are ever reported.

(c) Forest Fires and Fire-Protection.

29. Form No. 62 gives the details of fire-protection. The following abstract give a comparative statement of the results in two years with the total cost on fire-protection up to date.

ABSTRACT I.—Fire-protection (see Form No. 62) in square miles.

Total cost up to 31st March 1890.	1889–90.				1890–91.				Total cost during year 1890–91.	Total cost up to 31st March 1891.
	Area attempted.	Area burnt.	Percentage protected.	Average cost per square mile protected.	Area attempted.	Area burnt.	Percentage protected.	Average cost per square mile protected.		
RS.	SQ. MLS.	SQ. MLS.		RS.	SQ. MLS.	SQ. MLS.		RS. RS. A. P.	RS.	RS.
88,477	2,700	200	92·5	6½	2,883	201	93	7 2 9	19,239	1,07,716

30. *Ganjam.*—The area shown as under fire-protection includes the whole of the forest reserves or 331,505 acres, but it is explained that the fire-protection afforded is limited to the entertainment of the services of fire-watchers, while the area burnt is an estimate of the extent of fires that occurred up to 31st March 1891. It is regrettable that in the Berhampore range fires extended over nearly 30 per cent. of the forests under protection for the past six years.

Vizagapatam.—Fire-protection is reported as successful in the areas under previous protection which were not extended in the year under report.

Godávari.—In this district, protection is reported to have been successful, only 500 acres having been burnt out of over 126,000 acres, while the charges for protection were very small and confined to payment of watchers' wages.

Kistna.—The areas under previous protection were successfully protected in the year under report. An attempt to save three new blocks without special precaution was unsuccessful but the failure involved no expense.

Nellore.—The area of the Veligonda forests under special protection from fire was largely added to during the year and a comparatively small area only was burnt.

Cuddapah.—The return of areas burnt is for the fires that occurred from 1st April 1890 to the 31st March 1891. The opening figures of the statement show that a total area of 408,142 acres were protected on 31st March 1890, whereas the closing balance shown on last year's report was 432,114. The difference 23,972 is accounted for by our having in the previous year taken credit for certain blocks in the Seshachellam and Lankamalai reserves as well as in the total area of those reserves, thus counted twice over.

Kurnool.—The Atmakúr-Velgode block first protected in 1884 has apparently been abandoned. It is reported that the Southern Veligondas were not protected, because grazing was allowed, but the area under protection was largely increased elsewhere, especially near the railway in the Nallamalai hills and the Western Veligondas.

Bellary.—A commencement of fire-protection was made in the Adóni taluk in the Ganekallu reserve partly with a view to providing grass for the cattle in the neighbouring villages in case the monsoon were delayed. The reserve was saved from fire, but it has not been reported whether the saved grass has been of use.

The form shows two blocks—Hospet and Gundu—as apparently abandoned but in reality they are merged in the entries for the Sandúr leased forests which when first brought under fire-protection in 1883–84 were divided into certain blocks. These divisions were subsequently done away with.

The Ramandrúg range is reported to have escaped burning, up to 31st March but 30 per cent. of the north-eastern range and 60 per cent. of the Donimalai range were burnt. This is much to be regretted. The District report attributes the fire to high wind taking lighted materials across badly traced fire-lines, but the occurrence has not been fully reported. The circumstances of the season were exceptional. The commencement of fire-tracing was delayed by the late north-east monsoon and the impossibility of getting labour at the end of the year because of the triennial festival at Sandúr; while the services of the Range-officer were employed on census work and also on forest settlement duty at a very critical time. The reserves under special

protection in the Kúdligi range were saved from fire and a very large area of waste lands is reported also to have been protected.

Anantapur.—Fire-protection is reported to have been entirely successful in all areas previously protected, and an additional area of 23,200 acres were brought under protection at slight extra expense.

Nilgiris.—The area shown as protected differs considerably from that of previous returns. Whereas formerly 12,082 acres of Naduvatam sholas were protected, during the year only 3,938 acres are so shown, and there is a reduction of the protected area of the South-east Wynaad reserve from 3,500 to 2,776 acres. On the other hand, other areas are largely increased whereby the total protected area is brought up to 223,087 acres. Accidents were few and did not extend over large areas except in the case of one fire which burnt over 40,000 acres of Mudumalai and of another which covered 7,000 acres of Benne plantation for the first time brought under protection.

31. Judging from the reports it may be assumed that fire-protection was on the whole fairly successful, the percentage protected being 93 at a cost of 2·14 pies per acre. It would be better if areas under special protection, involving continuous outlay of capital expenditure, were separately accounted for, the present system of grouping saved waste areas very roughly estimated along with surveyed areas of reserved forest or plantations which represent large amounts of expended capital, is confusing and destroys the value of the return. It would be advantageous also if extensions of specially fire-protected areas were arranged before the working season commences. This will now be done under the new system of budgeting in detail lately laid down by the Land Revenue Commissioners.

(d) GRAZING.

32. The revenue from this source during the year under report amounted to Rs. 81,270 as against Rs. 79,470 in the previous year. From the district returns no uniform system appears to have been adopted for the recovery of the dues. In some, throughout whole taluks the reserved forests were closed to grazing, while in others it was unchecked both in reserved forests and reserved lands. The recent order of Government to provide grazing for the cattle of the country within the areas of reserved forests will lead to more uniformity. It is noteworthy that there is no mention of complaints regarding exclusion of cattle from forests in any one of the district reports.

33. *Ganjam.*—No revenue was received from this source. The order preventing grazing in reserved forests is declared to be treated as a dead letter, and the Collector proposes to close some of the blocks and to charge fees for grazing in others.

Vizagapatam.—In the Pálkonda range, the reserves are reported to have been closed to grazing. In the Sarvasiddhi range, the Peddapalle reserve was open to limited grazing at half rates and it was eagerly sought for. In Golgonda, the reserves though similarly opened for grazing were not resorted to. The total fees recovered in the district amounted to only Rs. 102.

Godávari.—Free grazing was allowed to the jungle tribes in the Bhadráchalam taluk. Certain small reserves, chiefly in Rajahmandri and Ellore, were closed to grazing, while half fees were levied in twenty-five reserves in Yernagúdem, Ellore, Narsápur and Peddápuram taluks, resulting in the recovery of a small revenue amounting to Rs. 5,527, as against Rs. 2,000 in the previous year.

Kistna.—A restriction on the rates to be charged by grazing contractors, whereby the fees leviable under the rules, section 26 of the Forest Act, were not to be exceeded, was the cause of a decrease in revenue to the extent of Rs. 7,371, only Rs. 41,170 being recovered as against Rs. 48,541 in the previous year. The Collector reports that departmental collection of grazing dues is being commenced experimentally in fourteen villages, to see if it be more profitable than the contract system. An additional advantage anticipated is that the grazing will thereby be regulated, the forests, at present, being damaged by excessive grazing and it is hoped that the detection and punishment of offences, such as goat-grazing and the lopping of trees, will be rendered easier. At the same time the contract system being an established one, it is proposed to replace it only gradually if the experiment prove a success.

Nellore.—The sum of Rs. 13,075 was collected on the "kancha" system. It is expected that revenue from this source will be increased when such lands, outside reserved forests, are brought under the category of reserved lands prior to their becoming reserved under the Forest Act.

Cuddapah.—The system in force is not changed, but the revenue has increased owing to better supervision and control over the Váyalpád side of the Seshachellam hills and to the increase in the number of foreign cattle. The chief trouble with Nellore cattle is that they spread over the area intended for the free grazing of the village cattle. The revenue from grazing and sale of grass has risen from Rs. 3,814 to Rs. 7,629.

Kurnool.—The revenue recovered was Rs. 9,021, as against Rs. 5,419 in 1889–90 and Rs. 6,233 in 1888–89. In the Nallamalais and Veligondas half rates were charged. An increase occurs in the various ranges except in Márkápur, where the decrease is attributed to changes of Range officers and partly to the fact that ryots drive their cattle through to the Nandikótkúr side which has the best grazing.

Bellary.—A return submitted from this district gives the area closed against grazing as 115 square miles out of 2,320 returned as the area of waste land. One-half of the closed area comprises the Adóni reserved forest lands, 31 square miles are closed in Hospet taluk, the rest being the Bellary taluk hills.

Grazing was allowed over 131,305 acres or 205 square miles on payment of fees at various rates according to the circumstances of each reserve. Goats and sheep were, however, excluded from them all. The revenue recovered amounted to Rs. 1,074 against Rs. 878 in the previous year. One of the protected blocks conveniently situated near the cantonment was handed over to the Commissariat for the removal of its crop of grass, on payment of Rs. 200.

Anantapur.—Out of 50 blocks containing 276½ square miles, only 21 blocks containing 205¾ square miles were opened for grazing. It was proposed to register 18,813 head of cattle for 131,700 acres or 205¾ square miles, but applications were received only for 10,974 heads as follows:—

Bullocks and cows	10,362
Buffaloes	612

This gave 7 acres each head.

Fees collected were as per Collector's report—

	Rs.	A.	P.
10,362 bullocks and cows at As. 2	1,295	4	0
612 buffaloes at As. 4	153	0	0
Total ...	1,448	4	0

against Rs. 440–8–0 in the previous year. Goats and sheep were always excluded from reserved forests and reserved lands, but no objection was taken to grazing on waste lands covering an area of 3,046½ square miles. The total revenue realized as per Examiners Form No. 64 is Rs. 1,657 against Rs. 1,154 in the previous year.

Nilgiris.—The differential scale of fees hitherto in force was altered during the year and a uniform half rate enforced for all reserved forests and reserved lands above ghâts and a quarter rate for forests below the ghâts. Range officers are again reported as having been slack in preventing forest grazing offences. The total revenue was Rs. 2,011 as against Rs. 1,639 the year before.

(e) Natural Reproduction.

34. *Ganjam.*—The district report merely mentions that for the reproduction of the Sál (*Shorea robusta*) protection from grazing and fire is essential, and that the reproduction in Goomsur is promising where forest is not over-grazed and fire is excluded.

Vizagapatam.—The following is reported:—

"In Golgonda and Pálkonda taluks the reproduction is good and in Sarvasiddhi though the rainfall is less, yet as the Peddapalli reserve has been under special protection for the past 5 years, there is a promising and uniform growth from 8 to 12 feet in height fairly dense and in places impenetrable. Previous to reservation the hills were bare of grass and brushwood."

Godávari.—In the low country in small reserves closed to grazing the regrowth is apparent. In the Beddadavole and Marlagudem reserves, seedlings of Maddi (*Terminalia tomentosa*), Teak (*Tectona grandis*), Billudu (*Chloroxylon swietenia*), Chiriman (*Anogeissus latifolia*), &c., have grown spontaneously and profusely and these reserves have been protected from fire. In the reserves of Koppili and in the Kovada hills, Kondathangedu (*Xylia dolabriformis*) and Bamboo come up luxuriously in spite of large fires. In the Ellore range the reproduction of Billudu (*Chloroxylon swietenia*), Yepi (*Hardwickia binata*) and Teak is noticeable as a result of continuous protection. It is also good in the coast forests closed to cutting.

The Acting Conservator recently visited the Devancheruvu reserve. The standards left in the portion cleared in the past year have shot up well, but the thorny species have come up again very generally, and a thicket has resulted which will materially interfere with the coppicing of tree species.

Kistna.—Seedlings from 1 to 2 feet in height of Yepi (*Hardwickia binata*), Satinwood and Chiriman (*Anogeissus latifolia*) are found fairly distributed over the Bollapalli blocks closed against grazing for the past two years and form a striking contrast with the adjoining blocks which are not protected. Similarly in the Kondavid and Bellamkonda reserves, the undergrowth is becoming thick and the better class trees are improving.

In the Kondapalli reserve which has been protected for a longer period the undergrowth is almost impenetrable, but this will disappear as better trees grow up and form a leaf canopy.

Nellore.—The following is reported :—

"Trials were made in the Sríharikót plantations under this head. The experiment of increasing reproduction by cutting the roots of Neredu (*Eugenia jambolana*) trees was continued during the year with good results, many shoots having come out and most of them being in a healthy state. The result on natural reproduction consequent on the exclusion of cattle, especially goats, is particularly noticeable in the plain jungles, and this result was also noticed by the late Conservator, Mr. Gamble.

"Noticing that some broken casuarina trees had coppiced, Mr. Peet considered that it would be interesting to find out the time of the year when the trees could be coppiced, and whether they could be cut flush to the ground, or what length of stem should be left. Accordingly ten trees were cut every month, some flush and others having a stem from 2 to 4 feet. The three best months for coppicing were found to be September to November, and those coppiced best where the stem was 4 feet. It was also noticed that under shade the coppice did best."

Cuddapah.—The district report mentions a successful seedling growth of Red Sanders (*Pterocarpus santalinus*) in forests of the main division which were under protection from fire, and in some of the richer slopes it is difficult to penetrate through the mass of young poles of various species. It is also noted that on rocky soils and forest exposed to annually recurring fires there are no seedlings visible. In the Seshachellam reserve near Yerraguntlakota much damage was caused in October by a flight of locusts which stripped the trees of their leaves and large branches were broken by the weight of the insects. It is also noteworthy that the ordinary bamboo seeded in most parts of the Cuddapah district during the year.

Kurnool.—It is reported that in the Yerramalai Hills the effects of reservation are already marked, while in the Nallamalais reproduction is good notwithstanding the forest fires and grazing. A young seedling growth of bamboos is coming up after the general seeding of the species in the Nallamalais during the previous year.

Bellary.—The district report contains but little on this head, but the Acting Conservator, who was himself in charge of the forests during a portion of the year, can testify to the satisfactory growth that has come up in the lower eastern slopes of the Ramandrúg range which were cut over subsequent to his last visit to the forests in 1884; while throughout the range the beneficial effect of even the partially successful measures for protection from fire is apparent. The other ranges of the leased forests have not been so fully protected and the growth is still thin.

Again, in Kúdligi much good has resulted from the introduction of conservancy and reservation, especially as regards the regrowth of *Hardwickia* from the stool.

Anantapur.—The district report confirms the remarks quoted in the Annual Administration Report of 1889-90 so far as the reproduction of *Hardwickia* in Muchukota and Kottakota, especially in the latter, where the additional protection of a

stone wall has caused a marvellous growth of trees of various species. In the protected areas of Nilikota, Kalyándrúg and Gutur, *Dolichandrone* seedlings have come up satisfactorily, and Margosa is reported to be flourishing in the cleared portions of Kotapalli.

Nílgiris.—The following is taken from the district report:—

"The growth of self-sown seedlings and shoots in the thinned compartments 1 to 5 of block No. II of Mudumalai Forests, which were specially protected from fire and grazing, is reported to be good. The coppice shoots from the trimmed stools of trees cut at Benne also grow fairly, but some of them suffered from fire. The reproduction in the marginally-noted indigenous sholas on the plateau, where creepers were cut and undergrowth removed, is fair. The growth of coppice shoots in the Eucalyptus plantations worked under the plan of operations is very good."

Dodabetta, Cairn Hill, Elk Hill, Town shola and Ghât reserves.

(f) Artificial Reproduction and Cultural Operations.

35. The following abstract shows the cost and progress of work on plantations, topes and other cultural operations:—

Abstract J.—Plantations and Topes (see Forms 60 and 61).

	Up to 1889-90.		Added during 1889-90.		Added during 1890-91.		Total.	
	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.
		Rs.		Rs.		Rs.		Rs.
Plantations	7,144½	4,22,290	— 382¼ — 7	13,979 — 371 — 148*	169¾	10,700	7,689½	4,46,450
Topes	6,865	1,11,572	— 41 — 51	2,125 — 1,936	43	2,380	6,898	1,14,141
Other charges (cultural operations)	774	9,044	397½	2,941 — 20 + 148	793⅛	— 4,716 — 30	1,964⅝	16,799
Total ..	14,783½	5,42,906	— 820¾ — 58	19,193 — 2,475	1,005⅞	— 17,796 — 30	16,552⅛	5,77,390

* Included under "Cultural operations" this year.

The quantities shown as "minus" under the head "added in 1889-90" were explained in detail in the last annual report. The minus entry under the cost of other charges (cultural operations) added during the year under report refers to two abandoned areas, Kúdligi and Gollapalle, in the Bellary district.

36. The work of the year was as follows:—

Ganjam.—It is reported that edible date palm seeds were sown over from 70 or 80 acres in the Chatrapur reserve and germinated successfully. The seedlings were from 6 to 9 inches in height at the commencement of the current hot weather, and it is hoped that the plants will survive the season of drought, in which case the plantation may be considered as established. Doubt is, however, expressed whether the trees will ever blossom and fruit in the moist and cool climate of Chatrapur.

The sowings of various species reported last year are said to be successful and have been continued.

Vizagapatam.—There are no plantations in the district, nor, in the year under report, were any cultural operations carried out. Two topes of large area were protected without special cost.

Godávari.—There are two plantations in the district, viz., Bendamurlanka and Narsápur, both of which are reserved forests. The area under casuarina was increased by 5 and 3 acres, respectively, at a cost of Rs. 374 and 415. Eucalyptus was planted in the Bendamurlanka reserve and the seedlings are reported to be doing well.

No topes are under the management of this department in this district.

No experiments were made during the year, but the Arabian date plants planted in previous years are reported as doing well.

In the Ramasampeta reserve a number of seeds were sown and of those that germinated about 200 seedlings survive.

Kistna.—From this district it is reported as follows :—

"Five and 10 acres in Gopuvanipalem and Kanukollu plantations, respectively, were planted with casuarina and Maddi (*Terminalia tomentosa*) plants one year old. In the Weld and Bápatla plantations, 20 and 8 acres, respectively, were ploughed up and sown broadcast with seeds of Kanuga (*Pongamia glabra*), Tamarind (*Tamarindus Indica*), Margosa (*Melia Indica*), Soapnut (*Sapindus emarginatus*) and Dirisana (*Albizzia Lebbek*) as recommended by Mr. Gamble. A fairly good number of seedlings have come up, but it remains to be seen whether they will get through the hot weather.

"The nurseries in Bezváda and Kondapalli were maintained, and in the former about thirty thousand seedlings of various indigenous species were raised, twenty thousand of them have been basketted and are kept ready for planting *in situ* on the Bezváda hill in the rains of 1891. On the same hill side were planted during the year under review ten thousand seedlings of Neredu (*Eugenia jambolana*) and Maddi (*Terminalia tomentosa*).

"The cost of planting 25 acres was Rs. 1,858. Cultural operations cost Rs. 889 and expenditure on topes amounted to Rs. 258."

Nellore.—The following is taken from the district report :—

"The experiment of gradually converting the casuarina plantations into forests of indigenous growth by cutting away a few of the trees to make a clearing and sowing seeds of various kinds in patches was continued in the year under report. The plantations at which this experiment was tried were those at Dugarázpatnam, Tammanapatam and Kottapatam over an area of 70 acres. Almost all the seeds that were sown germinated and throve till February when they showed signs of withering, and by the end of April 1891 most of the seedlings at Dugarázpatnam and three-fourths of the seedlings at Kottapatam and Tammanapatam perished from the heat and failure of the usual monsoon. The trials made at Sríharikót of sowing seeds broadcast in open spaces in the jungle over an area of 60 acres have also not proved successful, the seedlings having succumbed to the succeeding hot weather. The plants, mostly Vepa (*Melia Indica*), Tangedu (*Cassia auriculata*) and Chikreni (*Albizzia amara*) in four of the patches sown in 1889-90 at Dugarázpatnam and 14 of the patches sown in the same year, covering an area of about 6 acres are thriving well.

"It is to be regretted that the two years in which this experiment was tried were years of short rainfall and of abnormal heat. There is reason to believe that if the experiment is persevered in, the ground could be covered with indigenous growth."

Cuddapah.—The average girths in the sample area of the red sanders plantation, which is recorded annually, is 21·70 inches against 21·39 inches the year previous, but the experiment has been vitiated owing to 23 trees losing their bark; so the average has been kept down. This average girth is determined from the measurement of 319 trees 25 years of age. Coppice of the red sanders is thriving. Shoots under two years of age are over 6 feet in height in 11 cases out of 95.

A very large number of palmyra seeds were sown along the river bank in the Kamalápuram plantation, but as yet they have not germinated. Sowings of other species including red sanders (*Pterocarpus santalinus*), Maddi (*Terminalia tomentosa*), Yepi (*Hardwickia binata*) were made in the plantations of Kamalápuram and Appayapalli and a large proportion has come up.

Tangedu (*Cassia auriculata*) sowings were continued in Pullampet and Uparapalle, but the drought caused the seedlings to wither. Similarly, casuarina trees at Madanapalle and elsewhere are dying from the same cause.

Kurnool.—Nil.

Bellary.—Nil.

Anantapur.—Five acres in Khojapalle were sown with palmyra seeds, and 500 seeds of the same species were sown in the Anantapur reserve; the result not reported.

Nilgiris.—The district report states :—

"The season was not very favourable for planting. The new planting done in Aramby and Cairn hill reserves consisted chiefly of *Frenela, Pinaster, Cypress* and indigenous plants, and that in the Coonoor peak and Rallia of *Frenela, Acacia dealbata, Pinus longifolia, Casuarina suberosa* and *Cupressus macrocarpa.* In the Kullar reserve, *Swietenia macrophylla*, Vengai (*Pterocarpus marsupium*), Teak (*Tectona grandis*) and *Cedrela toona* were planted.

"The nurseries at Lovedale, Sims' Park and Kullar have been maintained in excellent order. The nursery at Tippacadu was abandoned during the year and the Calcutta Mahogany (*Swietenia macrophylla*) plants were planted round the Benne Rest-house.

"The principal plants raised in the Lovedale nursery were species of *Pinus, Cryptomeria Japonica* and *Bucklandia*, and indigenous shola plants. Those raised in Sims' Park were *Bucklandia, Frenela* and indigenous shola plants; in Kullar various exotics and indigenous plants were reared, especially *Cedrela toona*, Teak (*Tectona grandis*) and Vengai (*Pterocarpus Marsupium*).

"The existing blanks in the Lovedale reserve were filled up with *Bucklandia, Casuarina* and indigenous shola tree seedlings, chiefly *Michelia Nilagirica*; those in the Ghât reserve and Rallia reserve with *Casuarina suberosa, Cedrela toona, Daphniphyllum, Eleocarpus oblongus Frenela Rhomboidea* and *Pinus longifolia*. The Sims' Park reserve is used as an experimental garden and various species of *Eucalyptus* and other exotic plants received from time to time for experiment have been planted out in it. The plants have been well taken care of and labelled carefully."

(g) Works of Improvement.

37. The reports from Ganjam, Vizagapatam, Nellore and Kurnool make no mention of any works of improvement properly so called carried out during the year.

Godávari.—The sum of Rs. 2,154 recorded under other works-A, VIII (*f*) was expended on clearing the thorny undergrowth and removing crooked trees in two blocks of the Devancheruvu reserve.

Kistna,—In the Kondapalle reserve creepers were cut over an area of 700 acres at a cost of Rs. 217.

Cuddapah.—The chief works were—

(1) Thinning bamboo clumps over 20 acres in Settigunta.

(2) Cutting back badly grown trees among the teak in Kódúr Red Sanders plantation and over 40 acres of Thanakonda reserve.

(3) Creeper cutting over 11 acres on Horsleykonda and 50 acres in Balapalle working circle.

Bellary.—No creeper cutting was carried out. Part of the 6th compartment of Rámandrug was thinned and 138 tons of fuel were cut and stacked in the lower part. At the close of the year improvement thinnings were begun at the summit, and the fuel is being supplied to the Commissariat at Rámandrug.

Anantapur.—In Kojjapalle reserve, block II, 31 trees were felled and converted into 664 cubic feet of fuel.

Nílgiris.—Creeper cuttings were carried out over an area of 50¾ acres in 5 reserves for Rs. 296-12-0 and the produce cut was sold for Rs. 630-6-0, which gave a profit of Rs. 333-10-0. "Strobilanthes." and other undergrowths were removed. In field No. F-15 creepers and the undergrowth were cut twice at the instance of the Coonoor Municipality for Rs. 80, but the produce being useless was only burnt.

The report shows that the following works were carried out as improvement thinnings :—

Mudumalai Forest.	Acres.	Cost.	Rate.	Remarks.
		Rs. A. P.	Rs. A. P.	
Block II, Compartment No. 5	34	257 9 6	8 8 0	No demand for produce and so it was not sold.
Marliamund	11½	80 0 0	7 10 5	Yellow wattle sold for Rs. 164. Profit Rs. 84.
Brooklands reserve	9	49 0 0	5 7 1	Sold for Rs. 263. Profit Rs. 214.
Town shola, Coonoor	11	117 8 0	5 14 0	Sold for Rs.214-5-0. Profit Rs. 96-13-0
Ghât reserve	9			

Not much dead-wood was removed from the Moyar reserve, there being no demand for such produce.

38. *Fencing.*—Under the head of "fencing" only a few districts have reported work done.

Cuddapah.—Three topes in Cuddapah range, 2 in Proddutur and 3 in Kádiri were fenced or walled or had their fences thoroughly repaired during the year.

Anantapur.—Kojjapalli reserve was fenced to the length of 4,606 yards with babul at a cost of Rs. 113-7-6. In Guntakal block I, 3½ miles of boundary ditching were done for Rs. 42-9-4.

In Pamidi reserve, ¾ mile of fencing with babul was done at a cost of Rs. 33-6-0.

Godávari.—The fencing of the Devancheruvu reserve was continued by heaping up along the outer edge of the boundary line, the thorny branches which were cut when clearing the undergrowth in the two blocks.

Communications and Buildings.

39. The following is a comparison of the total expenditure of this year with that of the previous two years:—

—	1888–89.	1889–90.	1890–91.
	RS.	RS.	RS.
Roads	9,234	9,752	9,020
Buildings	14,457	13,422	15,447
Other works	302	826	548
Total ..	23,993	24,000	25,015

The total amount spent has remained at the same figure practically; notwithstanding every desire to push on such works the District Forest-officers have not been able to carry them out from press of other duties.

Roads.

40. The works done in the various districts were—

Ganjam.—New roads—

Name.	MILES.	Cost. RS.
Gullery-Rambha	2	465
Tilsingi-Chondorgiri	1¼	306
Branch to Tarsingi	¾	90
		861
Repairs to cart-tracks, &c.		201
		1,062

Vizagapatam.—In Golgonda taluk, two miles of plain road and two miles of ghât road were laid down under the supervision of the District Forest-officer in July and October 1890, but the work was not proceeded with for want of a Range officer to superintend it. In Pálkonda range a road was commenced from Donabayi (which is the forest centre of the Agency) to join the Sitampet-Pálkonda road. Only 1½ miles were made and the work was then taken up by the Revenue Department and is in progress.

Godávari.—Only two roads, viz. (1) Pakalagudem-Aukanagudem road, 6 miles, (2) Routulagudem-Aukanagudem road, 7 miles, were started and completed at a cost of Rs. 1,980.

In the sub-division nothing was done except repairs to the extent of Rs. 166. This is reported to be due to constant changes of officers and to the attention of the Sub-divisional officer being concentrated on the regulation of the timber traffic.

Kistna.—The following are the works done:—

	MILES.	Cost. RS.
New Roads.		
Mellavagu-Nekarikallu	13	525
Venkatayapalem, II section	8	520
Repairs.		
Ballapalli-Ravidicherla	8	48
Ibrampatnam, Loya cart-track	9½	69
Clearing inspection paths in Kondavid reserve	3	65
Repairing Demudunutalapalem road	1	22
		1,249

A sum of Rs. 130 due for Venkatayapalem, II section, road was not disbursed.

Nellore.—No roads were under construction during the year.

Cuddapah.—The principal works done were—

	MILES.	Cost. RS.
Connecting the Ragimanipenta road with the Local Fund road to Cuddapah (incomplete)	$\frac{7}{8}$	222
Converting Pedaralasagadu track into a road (incomplete) ...	$\frac{3}{4}$	222
Construction of Kavakona road (incomplete)	$1\frac{1}{2}$	62
		506
Repairs to the existing roads		223
		729

Further progress was hindered by the dryness of the season.

The district report contains some interesting figures showing the circulation on these roads and points out where increased traffic will result from minor extensions and improvements.

Kurnool.—Out of a budget allotment of Rs. 2,000 only Rs. 830 were spent. This was owing to the want of sufficient establishment—

	MLS.	Cost. RS.
Mahanandi road	$1\frac{1}{2}$	347
Siddapuram-Velgode road	1	425
		772

A sum of Rs. 40 was spent on the Digametta cart-track and Rs. 18 on a foot-path in the Márkápur range.

Bellary.—Only two roads were made, viz. :—

	MLS.	Cost. RS.
Donemalai bridle-path	$1\frac{1}{5}$ or (2,135 yards).	214
Gamble's road	4 or (6,971 yards).	300
		514

There is now a broad cleared path along the summit of the Ramandrúg range which, with some minor improvements, will admit of carts traversing it from end to end.

Anantapur—

	MLS.	Cost. RS.
Inspection path of Narsápur date plantation	$\frac{1}{2}$	66
Bukkapatnam-Narsampalli road	2	30
Road on Penukonda hill	2	145
Hill road in Kothakota reserve	$\frac{1}{8}$	12
Amagondapalem-Gopidevarapalle road (cart-track)	2	8
		261
Repairs.		
Road in Khojjapalle reserve	$2\frac{3}{4}$	60
Inspection path in do.	$3\frac{1}{4}$	38
		98
		359

	Furlongs.	Cost.	Length still to be done. M.	F.
Nilgiris—		RS.		
Road from Benne to the Nellakotta Sultan's battery road (2 feet wide)	6½	72	4	1½
Road in Cully reserve	2¾	226		
Road from Mr. Parson's road to Sígúr road in Aramby reserve		517		
A trial trace for an export road		23		
Cost of New Roads		838		

The existing roads in the Ootacamund, Coonoor and Mudúmalai ranges were repaired and side drains cut for Rs. 1,087. A sum of Rs. 200 was paid as contribution to the Kalhatti waterfall bridge as the road is useful for inspection. Total cost incurred was Rs. 2,125.

Buildings.

41. *Ganjam.*—The following houses have been built in addition to those reported last year :—

1. Gundribadi.
2. Jagannathprasad.
3. Khariguda.
4. Bonta.
5. Tarsingi.
6. Kurcholi.
7. Pippalaponka.

In addition to these it is proposed to construct houses at Baibaly and Bodingy when, it is believed, the district will have a sufficient number of houses for all present forest purposes. During the year Rs. 2,603 have been spent under this head, but the district report gives the expenditure as Rs. 1,771 only.

Vizagapatam.—Nothing has been spent on houses, but a forest depôt at Kondasantha is in course of construction.

Godávari.—Two more rest-houses at Singaram and Chintur in Bhadráchalam were completed and added to the list. A rest-house at Mulagalampalli, Yernagúdem range, is in course of construction.

The revenue office shed at Wuddagudem was burnt for the second time on 6th March 1891, when the whole village took fire. The loss was not serious. Three currency notes valued at Rs. 10 each, some cash, chalans and cheques kept in the iron safe were destroyed with the exception of the coins which only got discoloured. It is proposed to build a new shed outside this village which has been destroyed twice by fire.

The total amount spent on construction is Rs. 1,288.

Kistna.—A rest-house at Bellamkonda was constructed during the year at a cost of Rs. 1,690 (of this only Rs. 1,200 were paid during the year) and added to the list of houses. The rest-houses at Kondavid and Kondapalle and the Vinukonda range house were repaired during the year at a total cost of Rs. 221. Seven Forest guards' huts were also constructed during the year at a cost of Rs. 173. During the year the expenditure was Rs. 1,594.

Nellore.—No new buildings have been constructed during the year, but a store shed at Sríharikót is in course of construction and the Udayagiri bungalow was repaired.

The total expenditure is—

	RS.	
On construction	874	
On repairs	190	
		1,064

Cuddapah.—The district report gives a complete list of houses and other buildings in the district. It is reproduced below for reference for the next year's report. Only two houses at Rolabodu (Lankamalais) and Kortimadugu (Palkondas) have been commenced and the work is in progress. Repairs have also been carried out to the range bungalows and offices at Kódúr and Sidhout.

The total expenditure is Rs. 1,534 :—

Range.	Name.	Cost.	Walls.	Roof.	Out-houses.
		Rs.			
	Inspection, range and depôt bungalows.				
Kódúr	Kódúr bungalow	2,600	Brick in chunam ..	Tiled ..	Tiled.
	Balapalle dó.	510	Stone in mud ..	Thatch ..	Thatch.
	Mogilipenta do.	900	Do. ..	Iron .	Do.
	Office building at Kódúr	145	Do. ..	Tiled ..	..
	Kódúr range house	1,200	Brick in chunam and mud.	Do. ..	Tiled.
Rájampet	Rájampet range house	365	Brick in mud ..	Do. ..	..
Sidhout	Sidhout do.	525	Do. ..	Do. ..	..
	Inspection bungalow at Vontimitta ..	1,000	Brick in chunam ..	Do. ..	Tiled.
	Vontimitta depôt	260	Stone in mud ..	Terraced ..	..
Badvél	Range house	560	Brick in mud ..	Tiled ..	..
Madanapalle ..	Horsleykonda inspection bungalow ..	3,800	Brick and stone in mud.	Do. ..	Tiled.
Ráyachóti	Range office	445	Brick in mud ..	Do. ..	..
	Sanipaya inspection bungalow ..	1,900	Do. ..	Thatched ..	Thatched.
	Kurrapalle depôt	245	Stone in mud ..	Terraced ..	..
	Polisettivandlapalle	18	Do. ..	Thatched ..	..
	Forest inspection sheds.				
Kódúr	5 inspection sheds	127	Stone in mud ..	Thatched ..	..
Sidhout	2 do.	46	Do. ..	Do. ..	..
Badvél	1 do.	60	Do. ..	Do. ..	..
Cuddapah	1 do.	20	Do. ..	Do. ..	..
	Forest Guards' and Tannahdars' huts.				
Kódúr	16 Forest guards' and tannahdars' huts.	244	Mud	Thatched ..	..
Rájampet	12 do. do.	180	Do.	Do. ..	..
Sidhout	6 do. do.	72	Do.	Do. ..	..
Badvél	9 do. do.	132	Do.	Do. ..	..
Proddutur	2 do. do.	34	Do.	Do. ..	..
Cuddapah	12 do. do.	156	Do.	Do. ..	..
Kadiri	3 do. do.	42	Do.	Do. ..	..
Ráyachóti	5 do. do.	72	Do.	Do. ..	..
Váyalpád	3 do. do.	42	Dó.	Do. ..	..
Madanapalle ..	1 do. do.	20	Do.	Do. ..	..
	Huts and sheds in topes.				
Kódúr	3 huts	41	Mud	Do. ..	..
Rájampet	2 do.	10	Do.	Do. ..	..
Badvél	1 do.	20	Do.	Do. ..	..
Cuddapah	1 do.	10	Do.	Do. ..	..

Kurnool.—No new houses have been added to the list, but repairs and improvements to the existing houses have been carried out. The house at Mantrala has been completed with the exception of doors and windows, but the work on the whole is reported as not being very satisfactory.

The amount spent on repairs is Rs. 1,753.

Bellary.—The range house at Sandúr was finished during the year and the Donemalai rest-house was repaired.

The expenditure was as follows:—

	Rs.
Construction	544
Repairs	26
Total ...	570

Anantapur.—The following houses have been added to the list:—

(1) Pathakothacheruvu bungalow transferred from the Local Fund Department;
(2) Range house at Dharmavaram;
(3) Range office at Bukkapatnam (unfinished);

Also 2 guards' huts and a tannah hut were constructed. In addition to the above works, the existing buildings have been repaired and payments were made for the out-houses of head-quarters' bungalow constructed last year, also for those of Konapanainapalle.

The total expenditure during the year is Rs. 1,910.
The following is a complete list of houses in the district on 1st April 1891 :—

	Rs.
Head-quarters' bungalow with out-houses	6,991
Pathakothacheruvu bungalow	1,500
Gollah bungalow	5,000
(The building is actually worth Rs. 2,000.)	
Konapanainapalle bungalow	800
Penukonda hill do.	500
Konapanainapalle out-houses	187
Range house at Dharmavaram	470
Do. office at Bukkapatnam (not complete)	490
Two sheds for Forest guards	40
One tannah hut at Bukkapatnam	60
Total	16,038

Nilgiris.—The following were constructed :—

	Rs.
Rest-houses—	
Benne	713
Mudumalai	844
Range house—	
Benne	580
Miscellaneous huts—	
Gardener's hut at Lovedale	33
Kitchen to Burliyár rest house	115
Out-houses to Rallia do.	20
Guard's hut at Hulikal	90
Store-rooms in Coonoor fuel depôt	81
Portion of the Kulhatti range house	50
	2,526
Repairs, &c., to the existing houses	605
Total expenditure	3,131

Tramways.

42. Nellore is the only district in which tramways have been laid out in the Northern Circle. There are 2 lines, one at Srîharikót $4\frac{1}{2}$ miles in length and the other at the Casuarina Plantations $2\frac{3}{4}$ miles, the total length being $7\frac{1}{4}$ miles. The final results of the working are recorded in the following statement, submitted from the district which shows in the case of the older tramways that they have been a source of great saving. That in Srîharikót is also proving a success :—

STATEMENT showing the working of tramway in Nellore District for 1890–91.

Name of localities where tramway planted.	Length of line of tramway planted.	Quantity of wood carried in						Total quantity (columns 3 to 8).
		1885–86.	1886–87.	1887–88.	1888–89.	1889–90.	1890–91.	
1	2	3	4	5	6	7	8	9
	M. F.							
Tammanapatam (*a*) ..		1,891	164	..	..	249	171	2,475
Kothapatam (*b*) ..	2 6	..	1,872	..	2,066	255	..	4,193
Vutukur (*c*)		..	..	..	..	..	498	498
Varini (*d*)		..	..	..	..	(*e*) ..	1,742	1,742
Penubakam, Srîharikót range.	4 4	..	..	..	..	137	(*f*) 1,820	1,957
	$7\frac{1}{4}$	1,891	2,036	..	2,066	641	4,231	10,865

Boats.

Name of localities where tramway planted.	Total quantity in tons for 1 mile (columns 2 × 9).	Actual cost of carrying the quantity in column 10 by tramway.	Original cost of tramway materials.	Interest at 4 per cent. per annum and allowance for deterioration of plant at 6 per cent. per annum on the original cost of the tramway since it purchase.	Total cost by tramway (columns 11 and 13).	Probable cost of carting the same by common carts.	Average cost per ton per mile by tramway.	Average cost per ton per mile by common carts.
	10	11	12	13	14	15	16	17
		RS.	RS.	RS.	RS.	RS.	RS. A. P.	RS. A. P.
Tammanapatam (*a*).	3,094							
Kothapatam (*b*) ..	11,531							
Vutukur (*c*) ..	996	17,363	2,194	15,574	9,342	11,536	14,039	0 10 7	0 12 11
Varini (*d*)	1,742							
Penubakam, Srí-harikót range.	8,557		748	17,070	* 2,388	3,136	1,810	0 5 10	0 3 5
	25,920		2,942	32,644	11,730	14,672	15,849	..	..

(*a*) 1½ mile.
(*b*) 2¾ miles.
(*c*) 2 miles.
(*d*) 1 mile.
(*e*) 2 miles, 5 furlongs 90 feet.
(*f*) 4½ miles.

* Includes interest on capital for 2 years and allowance for wear and tear for one year.

43. *Godávari.*—No boats were built during the year and the 2 small boats sanctioned for the inspection of Upputeru and Coringa mangrove jungles have not been yet constructed.

Kistna.—A small boat was constructed at a cost of Rs. 45 for the use of the Nizampatam forest guard.

Nellore.—Two ferry boats were constructed during the year at a cost of Rs. 255 and an old one sold. In all there are 12 boats in the district belonging to this department.

Elephants.

44. *Godávari.*—There are 4 elephants in this district and of these one is reported to have been sick for a portion of the year, but the Acting Conservator recently inspected them and found them in health. They have dragged 745 logs from the forests and only 100 of them reached Rajahmundry depôt. Mr. Peet sent a timber truck for trial, but this is reported to have proved unsuccessful. The District Forest-officer proposed the construction of carts of a certain description; they were sanctioned and will be tried when buffaloes are available. These are intended to save the waste of power of the elephants in dragging logs in places where they can be carried on carts, and it is proposed to confine the elephants' work to parts of the forests where carts cannot penetrate.

Nílgiris.—There are 2 large female elephants and 3 calves, the eldest of which, a male, is 7 years old. This calf has been trained to drag logs up to 20 cubic feet. The female elephant named Lakshmi is reported to be past work and is not therefore worked. All the animals kept good health.

Charcoal manufacture in the Nílgiris.

45. During the year two Morean's kilns costing Rs. 1,346 were received on indent from the Secretary of State and were worked in the Governor's Shola Reserve.

The old Morean's kiln was worked in the Bandy Shola plantation up to January and was then removed to the Rallia Reserve.

The native kiln manufactured at Vellore and purchased last year, was first worked in the Aramby and Governor's Shola Reserves and then sent to Coonoor. The bottom of this kiln becoming burnt out it was of no further use.

The report upon the working of these kilns was supplemented by statements of cost and outturn, but being incorrectly prepared they have been omitted from the report.

CHAPTER V.

YIELD AND WORKING.

46. The following is the outturn statement for the year :—

ABSTRACT K.—Comparative Yield.

Heads.	TIMBER IN CUBIC FEET INCLUDING SANDAL-WOOD.		FUEL IN CUBIC FEET.		BAMBOOS IN NUMBER.		MINOR PRODUCE GROSS VALUE IN RUPEES.	
	1889–90.	1890–91.	1889–90.	1890–91.	1889–90.	1890–91.	1889–90.	1890–91.
							RS.	RS.
By Government Agency..	121,225½	(a)183,296½	851,983	(b) 1,211,946	108,386	(c) 137,095	12,566	9,756
By purchasers including drift and confiscations..	1,547,912	1,940,584	4,459,179	4,201,280	7,056,288	11,941,448	2,13,420	2,50,676
Free grants	15,630	30,046	230	..	13,989	14,310	400	588
Total ..	1,684,767½	2,153,926½	5,311,392	5,413,226	7,178,663	12,092,853	2,26,386	2,61,020
Difference in 1890-91 as compared with 1889-90.	+ 469,159		+ 101,834		+ 4,914,190		+ 34,634	
Percentages of increase or decrease on the previous year's totals	+ 28		2		+ 68		+ 24	

(a) Includes 9,190 cubic feet being excess found on remeasurement of timber collected and taken to depot in previous years.

(b) Includes 25,699 cubic feet being excess found on remeasurement of fuel collected and taken to depot in previous years.

(c) Includes 18,802 number being excess found in the number collected and taken to depot in previous years.

NOTE.—The value of minor produce given above is that of the quantity *disposed of*, not that of the quantity *collected*, as the value of the latter is not known.

There was an increase during the year in the total yield compared with that of the previous year, amounting to 28 per cent. under timber, 2 per cent. under fuel, 68 per cent. under bamboos and 24 per cent. under minor produce. The increase was in Godávari, especially where for the first time revenue was derived from the issue of bamboos from the Rampa forests.

SECTION I.—DEPARTMENTAL OPERATIONS.

47. The following gives a comparison of the trees felled departmentally in two years :—

ABSTRACT L.—Trees felled and converted (see form 68).

Opening balance, 1889–90.	Felled, 1889–90.	Felled, 1890–91.	Converted, 1889–90.	Converted, 1890–91.	Balance carried forward.	Remarks.
635	26,567	23,331	26,419	23,750 * 15	201	* Destroyed.

The decrease for the year in the number of trees felled occurred chiefly in the Nílgiris, where only 5,835 Eucalyptus and Acacia trees were felled during the year against 20,225 in the previous year; but this was, however, to a great extent supplemented by increased fellings of teak in Godávari and sâl in Ganjam. The short felling in the Nílgiris is due to slack demand and to a large quantity felled in the previous year remaining on hand during the year.

48. The following abstract compares the produce collected and disposed of for two years :—

ABSTRACT M.—Produce collected and disposed of (see forms 69, 70, 71 and 73-A).

	PRODUCE COLLECTED.						
	During 1889-90.			Stock at the beginning of 1890-91.	During 1890-91.		
	Quantity.	Cost.	Average.	Quantity.	Quantity.	Cost.	Average.
1	2	3	4	5	6	7	8
			RS. A. P.			RS.	RS. A. P.
Timber .. .. C. ft.	120,442½	21,857	0 2 11	179,094½	181,865½	22,657	0 2 0
Firewood .. .. ,,	851,983	37,404	0 0 8	925,619	1,211,946	53,010	0 0 8
Bamboos .. .. No.	108,386	897	0 0 2	13,491	137,095	650	0 0 1
Sandalwood .. .. C. ft.	783	1,856	2 5 11	43	1,431	1,574	1 1 7
Minor produce .. Mds.	25,306	5,643	0 3 7	4,864½	43,035½	5,833	0 2 2
Total ..	..	67,657	..	..	..	83,724	..

	PRODUCE DISPOSED OF					
	During 1889-90.			During 1890-91.		
	Quantity.	Cost.	Average.	Quantity.	Cost.	Average.
	9	10	11	12	13	14
		RS.	RS. A. P.		RS.	RS.
Timber .. .. C. ft.	148,322	43,599	0 4 9	148,879	33,031	0 3 7
Firewood .. .. ,,	675,347	59,474	0 1 3	1,303,871	96,178	0 1 2
Bamboos .. .. No.	112,686	2,745	0 0 5	114,725	1,803	0 0 3
Sandalwood .. .. C. ft.	740	5,616	7 9 5	1,257	11,229	8 14 11
Minor produce .. Mds.	26,434½	12,566	0 7 7	41,369	9,756	0 3 9
Total ..	..	1,24,000	..	..	1,51,997	..

49. During the year under report there has been an increase both in the departmental collection and disposal of the produce, viz., timber, fuel, bamboos, sandalwood and minor produce and the revenue has similarly increased.

Timber.—The increase under this head occurs chiefly in Godávari, Cuddapah and Nílgiris. It is due to sale of teak and miscellaneous logs in Godávari and the Nílgiris and of red-wood roots and miscellaneous windfall timber in Cuddapah. The sales in Godávari would have been more if the teak poles ordered and cut in the unreserved forests of the Bhadráchalam Sub-Division had been brought to Rajahmundry and sold during the year.

Fuel.—The increase occurs chiefly in Godávari, Nellore, Cuddapah, Kurnool and Anantapur. The sales of casuarina wood in Godávari, of the large stock of both jungle-wood pieces and casuarina in Nellore and the departmental supply of railway fuel in Cuddapah and Kurnool mostly contribute to the increase. In Anantapur it is due to the departmental thinning operations.

Bamboos.—The increase occurs in Kistna and Anantapur, but the collection in the former was utilized departmentally, that in the latter alone being sold.

Sandalwood.—This is collected only in the Nílgiris where the increase during the year is chiefly due to the collection and sale of a large quantity of sandalwood roots and branch wood of trees felled in previous years.

Minor Produce.—The increase occurs in Ganjam and Nellore. In the former, it is due to the collection of fibre used departmentally for rafting work, and to the clearance of large stocks in the latter.

50. The sales of departmentally collected produce both from depôts and forests amounted to Rs. 1,51,997; the amount actually realized, however, during the year was Rs. 1,61,696, the excess being due to the recovery of outstandings of the previous year.

51. The following figures show the difference between the actuals and the sanctioned budget figures for the year :—

—	Receipts.	Expenditure.	Surplus.
	RS.	RS.	RS.
As per sanctioned budget estimate ..	1,59,100	84,160	74,940
Actuals as per Form No. 64	1,61,696	83,724	77,972
Difference ..	+ 2,596	— 436	+ 3,032

Under this section there was an increased surplus of Rs. 3,032. The balance of revenue outstanding at the end of the year is Rs. 1,931.

52. The value of stock in depôts was diminished by Rs. 4,220 as shown below :—

Districts.	On hand at commencement.	On hand at close.	Difference.
	RS.	RS.	RS.
Ganjam	1,971	6,433	+ 4,462
Vizagapatam	..	12	+ 12
Godávari	456	536	+ 80
Nellore	2,837	30	— 2,807
Cuddapah	24,552	20,242	— 4,310
Bellary	190	..	— 190
Anantapur	3	..	— 3
Nilgiris	2,466	1,002	— 1,464
Total ..	32,475	28,255	— 4,220

The chief stock is of sâl sleepers in Ganjam and red sanders in Cuddapah, for which there is no current demand.

It should be recorded that after correspondence between this office and the Public Works Department through the Board of Revenue, Government in the Public Works Department declined to accept sleepers for the East Coast Railway to be made from the wood of the *Terminalia tomentosa*.

It is also to be mentioned that after much negotiation, the supply of fuel by Departmental agency to the Madras Railway was undertaken by the Cuddapah district. This course was necessitated by the unwillingness of the contractors to cut to conditions necessary to conservancy. There are signs of their re-considering their position, and they are ready to accept the terms offered.

Section 2.—Removal by Purchasers (Form No. 72-A).

53. The following abstract shows the removals by purchasers under permits or licenses for two years :—

Abstract N.—Produce removed by permit holders (Form No. 72-A).

Produce.	During 1889-90.			During 1890-91.		
	Quantity.	Amount of sales.	Average.	Quantity.	Amount of sales.	Average.
		RS.	RS. A. P.		RS.	RS. A. P.
Timber .. .. .. C. ft.	1,457,016	1,25,594	0 1 5	1,926,368	1,56,788	0 1 4
Firewood .. .. .. ,,	4,429,766	82,292	0 0 4	4,184,166	85,200	0 0 4
Bamboos .. .. .. No.	7,038,404	49,315	0 0 1	11,935,284	72,924	0 0 1
Grass and grazing	..	78,327	..	..	82,775	..
Minor produce	..	1,33,835	..	..	1,69,228	..
Total ..	..	4,69,363	..	..	5,66,915	..

The increase of Rs. 97,552 under sales and of Rs. 93,613 under realizations occurs in all the districts except in Cuddapah and the Nílgiris and under all sub-heads of revenue account.

54. The confiscations for two years were as follows :—

ABSTRACT O.—Confiscation (Form No. 72-B).

Produce.	DURING 1889–90.			DURING 1890–91.		
	Quantity.	Amount realized.	Average.	Quantity.	Amount realized.	Average.
		RS.	RS. A. P.		RS.	RS. A. P.
Timber .. .. .. C. ft.	90,896	12,087	0 2 1	14,216	4,839	0 5 5
Firewood .. .. .. ,,	29,413	745	0 0 4	17,114	571	0 0 6
Bamboos .. .. .. No.	17,884	171	0 0 2	6,164	62	0 0 2
Minor produce in value	..	115	..	..	178	..
Add outstanding amount of previous year.	..	..	..	..	116	..
Total ..	..	13,118	..	..	5,766	..

55. The smaller revenue is accounted for by the returns of Godávari and Kurnool and it is believed that in the former district the season's driftwood on the Godávari river had not come to Rajahmandri at the close of the year. In Kurnool, the previous year's revenue was derived from the sale of many years' accumulations of confiscated produce.

SECTION 3.—FREE GRANTS OF FOREST PRODUCE.

56. The following shows the free grants made by Collectors and District Forest-officers and their value for two years :—

ABSTRACT P.—Free grants.

District.	Timber.	Firewood.	Bamboos.	Minor produce in money value.	Money value.
	C. FT.	C. FT.	NO.	RS.	RS.
Ganjam	..	..	..	..	..
Vizagapatam	..	..	..	..	..
Godávari	..	..	..	..	..
Kistna	192	..	2,420	..	26
Nellore	15,634	..	..	195	1,529
Cuddapah	12,830	..	9,420	..	259
Kurnool	240	..	1,440	..	30
Bellary	..	..	..	390	390
Anantapur	..	..	..	..	..
Nílgiris	1,150	..	1,030	3	178
Total ..	30,046	..	14,310	588	2,412
Free grants of last year ..	15,630	230	13,989	400	2,931

From the statistics recorded in the abstract it will be seen that the amount of produce granted in the Nellore and Cuddapah districts is particularly large. In Nellore larger grants of palmyra trees and leaves were given than during the preceding year for the purpose of rebuilding houses consumed by fire. In Cuddapah also most of the free grants were made for the same purpose.

57. It is believed that in some districts which return a "*nil*" statement of free grants the public supplies itself without the formality of asking permission. This is especially the case in the Coast districts where forest conservancy is in its infancy and establishments are lax in carrying out their protective duties.

CHAPTER VI.

Financial Results.

58. The revenue and expenditure is given in Form No. 64.

The following abstract gives the cash results for five years :—

Abstract Q.—Cash results from 1886-87.

—	For 1886-87.	For 1887-88.	For 1888-89.	For 1889-90.	For 1890-91.	Sanctioned estimate for 1890-91.	The year under report compared with the previous year.	The year under report compared with the sanctioned estimate.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Revenue	5,52,248	5,64,723	6,16,920	6,06,610	7,45,547	6,65,500	+ 1,38,937	+ 80,047
Expenditure.								
A. "Conservancy and works"	2,20,443	2,18,009	2,54,298	2,18,513	2,43,096	2,69,250	+ 24,583	— 26,154
B. "Establishments" ..	2,14,523	2,35,785	2,20,244	2,39,817	2,48,459	2,58,750	+ 8,642	— 10,291
Total, Expenditure ..	4,34,966	4,53,794	4,74,542	4,58,330	4,91,555	5,28,000	+ 33,225	— 36,445
Net results ..	1,17,282	1,10,929	1,42,378	1,48,280	2,53,992	1,37,500	+ 1,05,712	+ 1,16,492

The revenue has increased considerably, the surplus of the year being Rs. 2,53,992, which is far greater than in any previous year notwithstanding the increased expenditure.

59. The increase under revenue is chiefly contributed by the transfer to Government of the revenue from the Rampa forests in Godávari; by crediting to "Forests" instead of to "Land Revenue" the sale-proceeds of soap-nut trees on darkhast lands and the usufruct of tamarind topes in Kistna; by the large increase in mica rents in Nellore; and by the sale of railway fuel and sandalwood in Kurnool and the Nílgiris respectively.

The increased expenditure under A. "Conservancy and Works" and B. "Establishments" is justified by the increased receipts.

60. Form No. 67 gives the distribution of revenue and expenditure under the 3 heads of "Departmental timber works," "Other revenue" and "Improvement of forests." The ratios adopted are the same as those of last year, viz., Vizagapatam 1, Bellary, Anantapur and Nílgiris 2 each and the rest 3 twenty-fifths.

61. Forms 73 (*a*) and 73 (*b*) show the comparison between the value of timber and plant respectively at the beginning and the end of the year. To compare the surplus to the credit of the department this year with that of last year, the same form is adopted, viz. :—

	Rs.
Net revenue	2,53,992
Outstanding revenue	5,798
Difference of value of plant (73-*b*)	16,357
Total ...	2,76,147
Deduct difference of value of timber (73-*a*)	4,220
Surplus to credit ...	2,71,927

The surplus for the year 1889–90, calculated in the same way, was, Rs. 1,57,330, leaving a comparative balance of Rs. 1,14,597 in favour of the year under report.

CHAPTER VII.

General Remarks.

62. As regards the work during the year of the District Forest officers and the other Gazetted Officers Mr. Peet has left no recorded notes. The Acting Conservator from such matters as have come before him from the various districts has reason to believe that they have worked with energy and success and to the satisfaction of the Collectors of their Districts.

63. The remarks in the district reports regarding the work performed by the Upper Subordinate Establishment, is on the whole, satisfactory. The sickly climate of the hill ranges in most of the districts of the circle is a constant cause of difficulty in administration for, energetic men are constantly ill and their places are taken by men who fear the forests and in consequence avoid them. Some difficulty has been experienced in recruiting for the department, but with the superior inducements now about to be held out it is hoped that a more steady supply of acceptable men will be forthcoming and the constant reference to Government for sanction to employ unpassed men will be obviated.

64. The health of the Department has been on the whole bad. Apart from the usual severe attacks of fever which are inseparable from a forest officer's life in India, we have to record the very serious illness of one officer with liver abscess from which he luckily recovered sufficiently to take sick leave to England.

65. *Forest School.*—Three Foresters were sent to the Forest School during this year. One Forest Ranger deputed in 1889 having obtained the Rangers' certificate returned to this Presidency.

APPENDIX A.

Experiments and Exotics.

Arabian Dates.

Godávari.—No experiments were made during the year; but it is reported that the Arabian date plants planted in previous years are doing well. In the Ramasarampeta reserve, a number of seeds germinated and about 200 seedling plants survive.

Cuddapah.—In the plantation behind the Ballapalle nursery, 190 Arabian date plants were planted, of which 40 died. It is reported, however, that those planted in previous years are well established and thriving. In the Reddipalli plantation, casualties were numerous, only 214 seedlings surviving out of 1,253, but it is anticipated from experience that some of the apparently dead ones will revive when the rains come on.

Persian Dates.

The date seedlings basketted in 1889–90 have been distributed as follows:—

Planted at Reddipalli	890
Given out free of charge for trial at Cuddapah and Madanapalle ...	24
Supplied to the Public Works Department	265
Died	361

The Public Works Department was supplied also with 235 off-sets of standard date from Ballapalle nursery for a plantation near the Cuddapah-Kurnool canal.

Kurnool.—All the plants, 25 in number, at Bairnuti look fairly healthy, but do not make much progress in growth. Of those planted in the Cumbum range, all died at Bodisowa and only 40 survive at Gundalamotu, but even these are not healthy.

Anantapur.—A nursery of 50 square yards was formed in the Khojjapalle reserve and Egyptian and bazaar-imported date seeds were sown and the results are:—

—	Number sown.	Number germinated.	Percentage.	Number of plants surviving.
Egyptian date	325	103	68·3	45
Bazaar date	2,500	1,600	36	1,594

Nilgiris.—Of the Cabul date plants planted at Kullar, nearly half died. The others are alive, but are growing very slowly. The nursery at Moyar was abandoned, as all the date plants were destroyed by elephants.

Mahogany.

Kistna.—The mahogany plants at Kanukollu and Bezwada are thriving well. They are from 5 to 10 feet high.

Cuddapah.—Most of the mahogany trees at Pullagundalamaddu have died, those at Arimanibunda are alive but are not healthy.

Nilgiris.—The mahogany and *Swietenia macrophylla* plants, planted between the years 1885 to 1890 in compartments 1 to 5 of block No. IV of the Kullar reserve, are growing fairly. Some of the trees have attained a height of from 15 to 18 feet. Those planted in moist places, especially near streams, are very healthy; but others in dry places look unhealthy and have been attacked by a borer. The *Swietenia macrophylla* plants were removed to Benné and planted out near the rest-house.

Eucalyptus.

Cuddapah.—At Mogilipenta 41 out of 47 eucalyptus died. The remaining six are about 10 feet high. On Horsleykonda, the trees are doing well, but some are inclined to be weedy, and two were broken off by high winds.

Nilgiris.—The various species of eucalyptus planted in previous years at Sims' Park and Lovedale are growing indifferently.

Various species.

Kistna.—About 4 lb. of seeds of Red Sanders were received from Cuddapah and sown in Kondapalli and Kondavid nurseries. Only about 10 per cent. of the seeds germinated.

Seeds of Thamba (*Shorea Tumbuggaia*) also were obtained from Cuddapah and tried in Kondapalli and Kondavid, but failed to germinate.

In the Bezváda nursery about 30,000 seedlings of soap-nuts, margosa, tamarind, dirisinam (*Albizzia Lebbek*) and kanuga (*Pongamia glabra*) were raised and 20,000 are kept ready basketted for planting up in the rains of 1891. On the Bezváda hill, which is almost bare, during the year 10,000 seedlings of Néredu (*Eugenia jambolana*) and Maddi (*Terminalia*) were planted out 6 feet apart in lines 10 feet apart. Ninety-five per cent. of these grew up. Some of them are now showing signs of withering owing to the excessive temperature in the shade which varies from 106° to 110°. As most of the plants are on the western slope of the hill, small stone walls 1 to 2 feet high have been erected to shelter each plant.

Nellore.—The seeds of several kinds of trees were sown at Sriharikóta, but the plants are reported to have died except those of *Albizzia procera*.

Cuddapah.—From the Balapalle nursery 1,844 seedlings of various indigenous trees were issued and planted in the Settigunta and Seshachalam reserves, but it is feared that many of them will not stand the severity of the present season.

Of the *Erythroxylon coca* plants 15 at Balapalle and 5 at Horsleykonda are doing well, while those planted at Cuddapah and Madanapalle failed.

Of 700 *Corypha elata* seedlings raised in 1889-90, 93 died, the rest are being planted at angles of reserve boundary lines and are thriving. Two seedlings only remain of Carob (*Ceratonia siliqua*).

In Horsleykonda, trees of *Acrocarpus fraxinifolius* are thriving excellently; some of them have attained 20 feet in height already. A large number of seedlings are now being raised for planting up the slopes of the hill.

Nilgiris.—During the year a small quantity of seeds of the following exotics were sown in the Lovedale nursery:—

(1) *Pinus cembra.*
(2) „ *Halepensis.*
(3) „ *Laricio Austriaca.*
(4) *Sequoia sempervirens.*
(5) *Picea excelsa.*
(6) *Cryptomeria Japonica.*
(7) *Bucklandia populifolia.*

Of these (1), (4) and (7) did not germinate at all, while all others have germinated. The plants are doing well in beds. They will be planted out as soon as the south-west monsoon sets in.

In Sims' Park the *Bucklandia populifolia* sown did not germinate at all.

The following seeds and plants were received for experiment at Kullar with the results noted against them:—

Name of seed.	Where sown.	When sown.	Quantity.	Result.
1. *Areca Madagascariensis* ..	Kullar	12th April 1890	2 lb.	Germinated and thriving well.
2. *Dendrocalamus Hamiltonii* ..	Do.	28th May „	1½ „	Only two plants are surviving and the others failed.
3. *Corypha umbraculifera* ..	Do.	13th Oct. „	6 oz.	Germinated and doing well.
4. *Red Sanders*	Do.	12th Nov. „	10 lb.	Do. do.
5. *Shorea Tumbuggaia* ..	Do.	12th „ „	10 „	Do. do.

Three plants of *Beesha Travancorica* were also received from Pálghat and planted at Kullar. They are thriving. *Dendrocalamus Hamiltonii* seeds sown at Moyar did not germinate.

Bamboos.

Kurnool.—The bamboo seeds (140 seers) sown in the Yerramalais in 1889-90 have all failed except 2,000 seedlings in Tekulakonda reserve and 100 in South Dhone.

It will be seen that much of the matter recorded in this appendix has already appeared in the body of the report. This was unavoidable.

APPENDIX B.

STATEMENT showing the cost and yield up to 31st March 1891 of the Casuarina plantations in the Nellore and Gúdúr taluks, Nellore district.

Plantations.	Compartment number.	Area.	Year of planting.	Total expenditure up to 31st March 1891.	Cost per acre.	Approximate return up to 31st March 1890.		Yield during 1890–91.					Approximate return during 1890–91.		Grand Total.	
						Yield up to 31st March 1891.	Amount.	Selection felling.	Dead wood cutting.	Clean felling.			Rate.	Amount.	Total tons 7 and 13.	Amount 8 and 15.
								Tons.	Tons.	Area.	Tons.	Total.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				RS.	RS.		RS.						RS.	RS		RS.
	1 & Extra interplanted.	45	1873 1874	10,132	225	1,838	10,727	..	29	..	..	29	4	116	1,867	10,843
	2	26	1874	6,908	265	590	3,539	..	..	..	..	..	..	..	590	3,539
	3	30	1875	6,449	215	754	4,524	..	..	..	..	..	..	..	754	4,524
	4	59	1880	3,397	57	896	4,677	85	16	..	..	101	..	404	997	5,081
	5	104	1881	4,416	42	914	5,192	325	51	..	..	376	..	1,504	1,290	6,696
	1882	4	1882	..	..	33	194	25	..	..	..	25	..	100	58	294
Dugarázpatnam ..	1883	73	1883	3,585	49	96	428	..	65	..	..	65	..	260	161	688
	1884	60	1884	2,583	43	9	54	..	83	..	..	83	..	322	92	386
	1885	30	1885	1,545	52	..	..	..	..	..	..	..	..	..	..	..
	1886	60	1886	443	7	..	..	..	..	..	..	..	..	..	..	..
	1887	100	1887	1,104	11	..	..	..	..	..	..	..	..	..	..	..
	1888	80	1888	2,108	26	..	..	..	..	..	..	..	..	..	..	..
	1889	10	1889	327	33	..	..	..	..	..	..	..	..	..	..	..
	1890	40	1890	385	10	..	..	..	..	..	..	..	..	..	..	..
Village tope casuarina	1883	4	1883	132	33	43	172	..	..	..	..	..	..	..	43	172
Ebrows tope ..	Resumed.	19	By Government under tope rules.			504	3,024	..	..	..	..	..	..	..	504	3,024
Salt tope	..	4	..	..	..	35	210	..	..	..	..	..	..	..	35	210
6. Islands in backwater ..	..	7	..	..	..	6	30	..	11	..	..	11	..	44	17	74
	1	24	1873	6,005	250	1,154	6,924	..	..	..	..	..	..	..	1,154	6,924
	Interplanted.		1874													
	2	24	1874	6,536	272	884	5,304	..	..	..	..	..	..	..	884	5,304
	3	32	1875	6,170	139	1,496	8,976	..	..	..	..	..	..	..	1,496	8,976
	4	40	1880	3,082	77	273	1,533	..	..	..	..	..	..	..	273	1,533
	5	112	1881	4,408	39	1,086	6,373	..	..	..	..	..	..	..	1,086	6,373
	1882	16	1882	..	..	..	..	..	..	..	..	..	..	..	..	..
Kottapatam ..	1883	22	1883	1,046	48	40	194	..	..	..	..	..	..	..	40	194
	1884	37	1884	1,591	43	..	..	..	..	..	..	..	..	..	..	..
	1885	30	1885	986	33	..	..	..	..	..	..	..	..	..	..	..
	1886	25	1886	222	8	..	..	..	..	..	..	..	..	..	..	..
	1887	50	1887	1,598	32	..	..	..	..	..	..	..	..	..	..	..
	1888	50	1888	1,262	25	..	..	..	..	..	..	..	..	..	..	..
	1889	30	1889	637	21	..	..	..	..	..	..	..	..	..	..	..
	1890	50	1890	331	6	..	..	..	..	..	..	..	..	..	..	..
Chatram tope ..	Resumed by Government under tope rules.				..	120	720	..	..	..	..	..	..	..	120	720
Pennanji do. ..					..	169	1,014	..	..	..	..	..	..	..	169	1,014
Royalpolium tope ..	..	..	..	..	..	13	65	..	..	..	..	..	..	..	13	65
	1	41	1873	12,143	196	769	4,614	..	..	..	..	..	..	..	769	4,614
	Interplanted.		1874													
	2	59	1874	9,576	162	1,008	6,048	..	..	..	..	..	..	..	1,008	6,048
	3	29	1875	7,878	272	587	3,522	..	..	..	..	..	..	..	587	3,522
	4	64	1880	3,808	59	377	1,788	45	31	..	..	76	..	304	453	2,092
Taminapatam ..	5	139	1881	5,779	42	155	872	69	117	..	..	186	..	744	341	1,616
	1882	81	1882	84	1	182	1,092	..	8	..	..	8	..	32	190	1,124
	1883	68	1883	2,392	33	1	6	..	10	..	..	10	..	40	11	46
	1884	30	1884	1,267	42	..	..	..	17	..	..	17	..	68	17	68
	1885	10	1885	381	38	..	..	..	..	..	..	..	..	..	..	..
Around wells of No. 1	1886	4	1886	262	65	..	..	..	..	..	..	..	..	..	..	..
Resumed by Government	..	4	Under tope rules.		..	118	708	..	..	..	..	..	..	..	118	708
Around wells of Nos. 2 and 3.	1887	20	1887	1,223	61	..	..	..	..	..	..	..	..	..	..	..
	1888	20	1888	791	40	..	..	..	..	..	..	..	..	..	..	..
	1890	10	1890	112	11	..	..	..	..	..	..	..	..	..	..	..

Statement showing the cost and yield up to 31st March 1891 of the Casuarina plantations in the Nellore and Gúdúr taluks, Nellore district—*cont.*

Plantations.	Compartment number.	Area.	Year of planting.	Total expenditure up to 31st March 1891.	Cost per acre.	Approximate return up to 31st March 1890.		Yield during 1890–91.					Approximate return during 1890–91.		Grand Total.	
						Yield up to 31st March 1891.	Amount.	Selection felling.	Deadwood cutting.	Clean felling.			Rate.	Amount.	Total tons 7 and 13.	Amount 8 and 15.
								Tons.	Tons.	Area.	Tons.	Total.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Rs.	Rs.		R.						Rs.	Rs.		Rs.
Vutukur	1	32	1875	7,527	232	94	470	..	208	..	..	208	..	832	302	1,302
	2	32	1880	3,927	122	22	120	..	124	..	..	124	..	496	146	616
	3	84	1881	4,824	57	8	40	..	139	..	..	139	..	556	147	596
Varany	1 Interplanted.	40	1873 1874	10,339	258	288	1,210	647	8	..	..	655	..	2,620	943	3,830
	2	40	1874	8,911	223	433	1,847	167	102	..	..	269	..	1,076	702	2,923
	3	40	1875	8,108	202	171	734	..	47	..	..	47	..	188	218	922
	4	40	1880	3,189	80	148	627	..	2	..	..	2	..	8	150	635
	5	80	1881	4,256	53	196	796	..	79	..	..	79	..	316	275	1,112
	1883–84	3	1883 and 84	121	40	..	..	..	..	..	..	..	..	..	..	..
Allipuram	1	18	1870	8,580	476	146	730	..	..	..	..	..	..	..	146	730
	2	36	1881	707	20	85	340	..	..	..	..	..	..	..	85	340
Iskapalli	..	6	1870	960	160	104	520	..	..	..	..	..	..	..	104	520
	..	2,327	..	184,533	80	15,845	89,958	1,363	1,147	..	..	2,510	..	10,040	18,355	99,998
						Increase in re-weighing				..	..	55				
												2,565				

APPENDIX C.

STATEMENT showing the yield of several compartments felled and thinned during the year 1890–91, according to the plan of operations, Nilgiri district.

Range.	Working circle.	Name of the reserve and block.	Compartment.	Area thinned or felled.		Age when thinned or felled.	Number of trees felled.	Firewood.						Drag poles.		Total yield in cubic feet.	Number of belt trees.	Number of standard left.	Total trees.	Estimated quantity of standing trees in cubic feet.	Total yield in cubic feet.	Yield per acre in cubic feet.
								Firewood lots.		Head-loads.		Bullock-loads										
				Acres.	Cents.			No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.							
1	2	3	4	5		6	7	8		9		10		11		12	13	14	15	16	17	18
Ootacamund.	Cairn Hill working circle.	Cairn Hill reserve block No. IX.	9	4	50	.13	1,786	203	20,300	1,903	1,903	..	..	..	..	22,203	..	..	1,786	..	22,203	4,934
	Aramby working circle.	Aramby reserve block No. IV.	7	3	25	14	1,953	216	21,600	1,287	1,287	..	..	..	..	22,887	..	..	1,953	..	22,887	68,581
	Do. ..	Do. ..	9	3	..	14	629	120	12,000	415	415	..	..	..	..	12,415	..	..	629	..	12,415	4,138
Coonoor.	Coonoor Peak working circle.	Coonoor Peak reserve block No. III.	19	2	..	17	245	63	6,300	346	346	10	40	140	140	6,826	25	107	377	4,000	10,826	5,413
	Do. ..	Coonoor Peak reserve block No. IV.	33	5	..	17	991	211	21,100	916	916	33	132	..	..	22,148	..	470	1,461	15,000	37,148	7,429
	Bleak-house working circle.	Bleak house reserve.	2	8	..	..	204	25	2,500	4,735	4,735	145	580	..	..	7,815	..	200	404	2,500	10,305	1,288

ANNUAL FORM No. 59-A.

Forest Department, Madras, Northern Circle.

AREA of Reserved Forests, 1890-91.

District.	Range.	Name of Forest.	AREA ON 1ST APRIL 1890.		ADDED DURING THE YEAR.	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 31ST MARCH 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Ganjam.	Chokapad (West Goomsur).	Dimrijholi	5,486	...	...	...	5,486	...	.....	
	Pondakhol (Suradá).	Bondagocha ...	4,400	...	...	...	4,400	...	.....	
	Bodoboro-singhi (do).	Malati ...	1,720	...	...	...	1,720	..	.....	
	East Gumsur.	Jaganathprasad ...	...	...	26,200	...	26,200	...	No 319 of 17th July 1890.	
	Suradá (Pondakhol).	Dabuki	...	...	1,450	...	1,450	...	No. 445 of 3rd Oct. 1890.	
	Do. (Badoborosinghi).	Vinjagiri	...	...	6,000	...	6,000	...	No. 31 of 28th Jan. 1891.	
	Buguda ...	Panchabuthi ...	...	...	4,320	...	4,320	...	No. 53 of 12th Feb. 1891.	
	Do. ...	Vishnuchakram ..	...	...	4,860	...	4,860	...	No. 68 of 16th Feb. 1891.	
		Total ...	11,606	18	42,830	...	54,436	85		
Vizagapatam.	Sarvasiddhi.	Peddapalle	8,960	...	...	*6,440	2,520	...		
		Total ...	8,960	14	...	6,440	2,520	4		
Godávari.	Delta ...	Narasápur	114	...	..	...	114	...	.. ...	
		Coringa	7,000	...	...	...	7,000	...	.....	
		Bendemurlanka ..	362	...	..	..	362	...	.....	
	Bhadráchalam.	Pulsumamidi ...	4,520	...	...	..	4,520	...	.....	
		Marigura	44,500	...	...	...	44,500	...	.....	
		Mattapalli	9,500	...	...	...	9,500	..	.....	
		Nelakota	...	...	2,500	...	2,500	...	No. 145 of 27th March 1890.	
		Komanpalli	...	...	3,250	...	3,250	..	No. 159 of 9th April 1890.	
	Rékapalle.	Bandroe	...	...	10,900	...	10,900	...	No. 159 of 9th April 1890.	
		Golagupa	...	...	8,000	...	8,000	...		
		Narakonda	...	...	7,500	...	7,500	...		
		Pengha	...	...	4,400	...	4,400	...		
		Upanapali	...	...	3,300	...	3,300	...		
		Tatlanka	...	...	12,000	...	12,000	...		
		Ramachendram ...	...	...	10,300	...	10,300	...		
		Rapák	...	...	7,000	...	7,000	...		
		Sitarampuram ...	...	..	3,000	...	3,000	...		
		Bhandargudem ...	...	...	7,100	...	7,100	...		
		Barkankota ...	...	...	1,500	...	1,500	...		
	Ellore ...	Chintalapudi ...	...	...	2,000	...	2,000	...	No. 192 of 5th May 1890.	
	Peddapur ...	Murari	...	...	700	...	700	...	No. 254 of 16th June 1890.	
	Ellore ...	Tadikalapudi ...	...	...	2,500	...	2,500	...	No. 260 of 16th June 1890.	
		Bandamcherla ...	...	...	5,200	...	5,200	...	No. 266 of 16th June 1890.	
	Bhadráchalam.	Mulkanapalle ...	...	...	3,658	...	3,658	...	No. 288 of 30th June 1890.	
		Dummagudem ...	...	...	6,110	...	6,110	...		
		Arlagudem ...	...	...	6,136	...	6,136	...		
		Tunikicheruvu ...	...	...	8,022	...	8,022	...		
		Bhadráchalam ...	...	...	10,860	...	10,860	...		
		Gogubaka ...	...	...	1,666	...	1,666	...		
	Ellore ...	Barrikonda	...	...	3,500	...	3,500	...	No. 295 of 30th June 1890.	
		Erranguntapalle ...	...	...	8,640	...	8,640	...	No. 333 of 21st July 1890.	
		Velagalapalle Blocks I and II.	...	...	2,200	...	2,200	...	No. 343 of 21st July 1890.	

*Revised Estimate of area.

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remark
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Godávari —*cont.*	Rékapalle.	Lakkavaram ...	..	...	6,500	...	6,500	..	No. 446 of 3rd Oct. 1890.	
		Kalleru	...	...	6,500	...	6,500	...	No. 52 of 12th Feb. 1891.	
		Total ...	65,996	* 103	154,942	...	220,938	345		
Kistna.	Bandar ...	Kara	21	...	...	...	21	...	.....	
		Vanudhuru	64	...	...	...	64	...	.....	
		Bomminampadu ...	26	...	...	...	26	...	.....	
		Vémavarampadu ...	16	...	...	...	16	...	.....	
		Allinagaram ...	125	...	...	...	125	...	.....	
		Bandar Fort ...	...	...	7,500	...	7,500	...	No. 197 of 13th May 1890.	
		Kodur	...	...	50	...	50	...	No. 233 of 4th June 1890.	
		Gollapalem	...	...	390	...	390	...	No. 258 of 16th June 1890.	
		Sorlagondi	...	...	2,880	...	2,880	..	No. 287 of 30th June 1890.	
		Yella chetladibba ...	...	...	4,640	...	4,640	...	No. 303 of 8th July 1890.	
		Konukollu	...	...	667	...	667	...	No. 361 of 7th Aug. 1890.	
		Nachugunta ...	...	...	8,640	...	8,640	...	No. 370 of 9th Aug. 1890.	
	Bezváda...	Gavuravaram ...	84	...	...	...	84	...	.....	
		Bezváda	300	...	...	...	300	...	.....	
		Gunadala	400	...	...	...	400	...	.. ...	
		Kondapalle extension	1,225	...	...	...	1,225	...	.....	
		Budavada ...	...	...	4,650	...	4,650	...	No. 323 of 16th July 1890.	
		Jaggayapet ...	...	...	4,570	...	4,570	...	No. 435 of 22nd Sept. 1890.	
	Guntúr ...	Nidamarru	383	...	...	...	383	...	.....	
		Karlapudi	994	...	...	...	994	...	.....	
		Narakodur	...	...	515	...	515	...	No. 85 of 18th Feb. 1890.	
		Kuragallu	...	...	1,305	...	1,305	...	No. 292 of 30th June 1890.	
		Tadépalli	...	...	2,305	...	2,305	...	No. 384 of 9th Aug. 1890.	
		Kondavid	...	...	12,857	...	12,857	...	No. 396 of 29th Aug. 1890.	
	Krósúr ..	Konanki	3,600	...	...	...	3,600	...	.. ...	
		Bellamkonda ...	1,380	...	...	...	1,380	...	.....	
		Venkatayapalem ...	...	...	46,201	...	46,201	...	No. 535 of 20th Nov. 1890.	
	Palnád ...	Tummurukodu ...	24	...	...	...	24	...	.....	
		Gangalakunta ...	24,461	...	...	...	24,461	...	.....	
		Madinapad ...	...	...	9,600	...	9,600	...	No. 200 of 13th May 1890.	
	Vinukonda	Bollapalli ...	...	...	40,000	...	40,000	...	No. 504 of 18th Nov. 1890.	
		Kakirala	...	...	17,520	...	17,520	...	No. 21 of 20th Jan. 1891.	
	Rápatla ...	Lankavanidibba ...	4,480	...	...	...	4,480	...	.....	
		Kothapalem ...	3,840	...	...	...	3,840	...	.....	
		Dindi	600	...	...	...	600	...	.....	
		Adavuladivi ...	610	...	...	...	610	...	.....	
		Bápatla I ...	245	...	...	...	245	...	.....	
		Do. II ...	1,032	...	...	...	1,032	...	.....	
		Karlapalem I ...	105	...	...	...	105	...	.....	
		Do. II ...	208	...	...	...	208	...	.....	
		Vedullapalli ...	166	...	...	...	166	...	.....	
		Muthayapalem ...	...	...	9,569	...	9,569	...	No. 121 of 12th Mar. 1890.	
		Pandillapalli ...	...	...	162	...	162	...	No. 365 of 7th Aug. 1890.	
		Waderevu	...	...	82	...	82	...	No. 379 of 9th Aug. 1890.	
		Kothapalem, No. II..	...	...	3,100	...	3,100	...	No. 382 of 9th Aug. 1890.	
		Total ...	44,389	69	177,203	...	221,592	346		

* Last year it was 103½.

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Nellore.	Ongole ...	Kottapatam ...	147	...	...	...	147	...	.....	
		Kanuparti	520	...	...	...	520	...	.....	
		Ongole Hill ...	...	...	60	...	60	...	No. 501 of 11th Nov. 1890.	
	Kandukúr	Ramapatam Casuarina Plantation.	60	...	...	...	60	...	.....	
		Chagollu	1,010	...	...	...	1,010	...	.....	
		China Laterapi ...	1,548	...	...	...	1,548	...	.....	
		Ravur	2,187	...	...	...	2,187	...	.....	
		Chakicherla ..	...	...	323	...	323	...	No. 190 of 5th May 1890.	
		Ramapatam ...	...	...	1,516	...	1,516	...	No. 198 of 13th May 1890.	
		Boddipudi ...	...	...	500	...	500	...	No. 207 of 21st May 1890.	
		Gudlur	...	...	3,297	...	3,297	...	No. 497 of 17th Nov. 1890.	
	Kávali ...	Tummalapenta ...	100	...	...	...	100	...	.....	
		Maddurpaud ...	2,012	...	...	...	2,012	...	.....	
		Zaladanki, East	600	...	...	...	600	...	.....	
		Do. West ...	1,254	...	...	...	1,254	...	.....	
		Tummulapenta, South	392	...	...	...	392	...	.....	
		Dharmavaram ...	189	...	...	...	189	...	.....	
		Zammalapalem ...	1,130	...	...	...	1,130	...	.....	
		Rudrakota	2,100	...	...	...	2,100	...	.....	
		Gattupalli	838	...	...	...	838	...	.....	
		Gollapalem	960	...	...	...	960	...	.....	
		Tallapalem ...	848	...	...	...	848	...	.....	
		Manubolupaud ...	1,192	...	...	...	1,192	...	.....	
		Kávali	...	...	2,000	...	2,000	...	No. 144 of 27th Mar. 1890.	
		Dundigam	...	...	515	...	515	...	No. 151 of 28th Mar. 1890.	
		Chamadala	...	...	750	...	750	...	No. 196 of 13th May 1890.	
		Zakképalli—Gudur...	...	...	800	...	800	...	No. 202 of 13th May 1890.	
		Nagalavaram ...	...	...	414	...	414	...	No. 259 of 20th June 1890.	
		Tummalapenta, West	...	...	2,280	...	2,280	...	No. 271 of 16th June 1890.	
		Bitragunta	...	...	1,908	...	1,908	...	No. 272 of 16th June 1890.	
		Narayanapuram ...	...	...	2,392	...	2,392	...	No. 290 of 30th June 1890.	
		Kesavaram	...	..	908	...	908	...	No. 360 of 7th Aug. 1890.	
		Chinna Annalur ...	...	...	3,400	..	3,400	...	No. 141 of 28th Mar. 1890.	
	Nellore ...	Iskapalle	23	...	...	...	23	...	.....	
		Kandamur	1,520	...	...	...	1,520	..	.. ...	
		Kakutur	480	...	...	...	480	...	.....	
		Dontali	1,280	...	...	...	1,280	...	.....	
		Chemudugunta ...	320	...	...	...	320	...	.....	
		Utukur-Varni Casuarina Plantation.	607	...	...	...	607	...	.....	
		South Mopur ...	1,000	...	...	...	1,000	...	.....	
		Kottapalli	...	...	4,230	...	4,230	...	No. 238 of 6th June 1890.	
		Marripad	...	...	1,400	...	1,400	...	No. 269 of 20th June 1890.	
		Turimerla	...	...	620	...	620	...	No. 320 of 17th July 1890.	
		Allipuram	...	...	125	..	125	...	No. 332 of 21st July 1890.	
		Amencherla, East ...	...	...	960	...	960	...	No. 362 of 7th Aug. 1890.	
		Do. West...	...	...	480	...	480	...	No. 363 of 7th Aug. 1890.	
		Vavveru	...	...	2,970	...	2,970	...	No. 447 of 3rd Oct. 1890.	
		Dagadarti	...	...	2,866	...	2,866	...	No. 483 of 30th Oct. 1890.	

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remar
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Nellore —*cont.*		Dugarazpatnam ...	1,200	...	...	...	1,200	...	.....	
		Kanupur, East ...	960	...	...	...	960	...	.....	
		Vendodu	818	...	...	...	818	...	.....	
		Idagali	480	...	...	...	480	...	.....	
		Vodúr	883	...	...	...	883	...	.....	
		Gúdúr	950	...	...	...	950	...	.....	
		Tammenapatam Casuarina Plantation.	485	...	...	...	485	...	.....	
		Cherukumudi ...	640	...	...	...	640	...	.....	
		Vellipedu	720	...	...	...	720	...	.....	
		Chillakur	460	...	...	...	460	...	.....	
		Vinduru	300	...	...	...	300	...	.....	
		Nellaballi	...	...	275	...	275	...	No. 135 of 24th Mar. 1890.	
	Gúdúr ...	Kadived, South ...	...	...	450	...	450	...	No. 137 of 24th Mar. 1890.	
		Do. North ...	...	...	468	...	468	...	No. 143 of 27th Mar. 1890.	
		Ankalapatur ...	...	...	240	...	240	...	No. 157 of 9th April 1890.	
		Pidatalapudi ...	...	...	750	...	750	...	No. 185 of 1st May 1890.	
		Madamanur ...	...	...	560	...	560	...	No. 231 of 4th June 1890.	
		Kanupur, West ...	...	...	1,974	...	1,974	...	No. 268 of 20th June 1890.	
		Ipuru	...	...	1,033	...	1,033	...	No. 330 of 21st July 1890.	
		Survépalli	...	...	2,750	...	2,750	...	No. 420 of 19th Sept. 1890.	
	Atmakúr.	Telugurayapuram ...	763	...	..	...	763	...	.....	
		Srikolanu	1,521	...	...	...	1,521	...	.....	
		Chejerla	1,121	...	...	...	1,121	...	.....	
		Turupukambampad.	...	...	861	...	861	...	No. 227 of 4th June 1890.	
		Bommavaram ...	...	...	3,000	...	3,000	...	No. 247 of 9th June 1890.	
		Prabhagiripatnam ...	...	...	2,500	...	2,500	...	No. 249 of 9th June 1890.	
	Rápúr ...	Turimerla	640	...	...	...	640	...	.....	
		Pulikollu	...	...	740	...	740	...	No. 122 of 12th Mar. 1890.	
		Morapur	...	...	3,130	...	3,130	...	No. 235 of 4th June 1890.	
		Todaru	...	...	750	...	750	...	No. 262 of 16th June 1890.	
		Vutukur	...	...	725	...	725	...	No. 265 of 16th June 1890.	
		Duggunta	...	...	1,200	...	1,200	...	No. 305 of 8th July 1890.	
		Mogallur	...	...	957	...	957	...	No. 318 of 16th July 1890.	
		Ayyavaripalem ...	...	...	320	...	320	...	No. 334 of 21st July 1890.	
		Chikavolu	...	...	1,100	...	1,100	...	No. 336 of 21st July 1890.	
		Chittalur	...	...	515	...	515	...	No. 338 of 21st July 1890.	
		Nellapalli	...	...	2,100	...	2,100	...	No. 341 of 21st July 1890.	
		Turupupundla ..	...	...	1,000	...	1,000	...	No. 342 of 21st July 1890.	
		Vavintaparti ...	...	...	1,300	...	1,300	...	No. 421 of 19th Sept. 1890.	
		Tummalatalpur ...	...	...	4,000	...	4,000	...	No. 422 of 19th Sept. 1890.	
		Chaganam	...	...	1,500	...	1,500	...	No. 430 of 22nd Sept. 1890.	
		Vadlapudi	..	...	2,400	...	2,400	...	No. 499 of 11th Nov. 1890.	
		Biradavolu	...	...	2,250	...	2,250	...	No. 500 of 11th Nov. 1890.	
		Total ...	34,258	* 53½	73,562	...	107,820	168½		

* Last year it was wrongly entered as 54½ square miles.

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Cuddapah.	Kódúr ...	Kódúr Plantation ...	50	...	...	...	50	...	.....	
		Thanakonda ...	1,048	...	...	...	1,048	...	.....	
		Uparapalle	108	...	...	...	108	...	.....	
		Kódúr Hill	7,440	...	...	...	7,440	...	.....	
		Seshachellam ...	128,000	...	...	...	128,000	...	.....	
		Settikunta	8,960	...	...	...	8,960	...	.....	
	Rájampet	Salivendra	12,800	...	...	...	12,800	...	.....	
		Pullampet	426	...	...	...	426	...	.....	
		Reddipalle	1,284	...	...	...	1,284	...	.....	
		Vattalúr	2,880	...	...	...	2,880	...	.....	
	Sidhout	Kanamalapalle ...	4,435	...	...	...	4,435	...	.....	
		Malliamkonda ...	10,240	...	...	...	10,240	...	.....	
	Badvél	Kavalakuntla ...	9,920	...	...	...	9,920	...	.....	
		Ganugapenta ...	14,080	...	...	...	14,080	...	.....	
	Cuddapah...	Kamalapuram	485	...	...	...	485	...	.....	
	Ráyachóti	Sibbyála	3,500	...	...	...	3,500	...	.....	
		Tsundupalle ...	3,000	...	...	...	3,000	...	.....	
		Gadikota	12,462	...	...	...	12,462	...	.....	
		Vandadi Hill ...	...	...	3,390	...	3,390	...	No. 346 of 1st Aug. 1890.	
	Váyalpád ...	Yellutla	2,840	...	...	...	2,840	...	.....	
	Madanapalle.	Kotammakonda ...	640	...	...	...	640	...	.....	
		Total ..	224,598	351	3,390	...	227,988	356		
Kurnool.	Cumbum...	Veligondas, South ...	...	...	16,755	...	16,755	...	No. 434 of 22nd Sept. 1890.	
		Do. North ...	...	...	21,540	...	21,540	...	No. 506 of 20th Nov. 1890.	
	Sirvél ...	Sirvél	...	...	116,730	...	116,730	...	No. 69 of 16th Feb. 1891.	
		Total ...	...	...	155,025	...	155,025	242		
Bellary.	Bellary ...	Timmapuram ...	1,046	...	...	...	1,046	...	.....	
		Tekkalakota ...	...	...	600	...	600	...	No. 70 of 16th Feb. 1891.	
	Bellary & Hospet.	Bellary	...	...	8,000	...	8,000	...	No. 164 of 15th Apl. 1890.	
		Tornagallu	...	...	2,100	...	2,100	...	No. 463 of 18th Oct. 1890.	
	Bellary & Rayadrug.	Mincheri	...	...	4,000	...	4,000	...	No. 221 of 3rd June 1890.	
	Ráyadrug ...	Aduguppa	...	...	950	...	950	...	No. 160 of 9th Apl. 1890.	
	Hospet ...	Joga	...	...	3,264	...	3,264	...	No. 60 of 10th Feb. 1891.	
	Kudlighi, Hospet & Hadagalli.	Shivapuram ...	...	...	9,000	...	9,000	...	No. 57 of 10th Feb. 1891.	
	Kúdlighi.	Gollalingammanahalli.	1,000	...	...	...	1,000	...	.....	
		Somalapuram ...	...	...	2,600	...	2,600	...	No. 148 of 26th Mar. 1890.	
		Tumbaragudi ...	...	...	2,500	...	2,500	...	No. 199 of 13th May 1890.	
		Cherbi	...	...	3,000	...	3,000	..	No. 432 of 22nd Sept. 1890.	
		Sunkadakal ...	...	...	7,000	...	7,000	...	No. 73 of 16th Feb. 1891.	
	Ádóni ...	Halvi	...	...	1,209	...	1,209	...	No. 433 of 22nd Sept. 1890.	
		Halekota	...	...	438	...	438	...	No. 261 of 16th June 1890.	

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Bellary —*cont.*	Alur ...	Gummanur (N., N.-E. N.-W.).	...	...	646	...	646	...	Nos. 98, 99 & 100 of 25th Feb. 1890.	
		Yéruru (S., S.-W., W.)	...	...	522		522	...	Nos. 101 & 102 of 25th Feb. 1890, 337 of 21st July 1890.	
		Chippigiri (S., S.-E., W.).	...	...	1,160	...	1,160	...	Nos. 103 & 104 of 25th Feb. 1890, 339 of 21st July 1890.	
		Degalahalu	...	...	110	...	110	...	No. 142 of 28th Mar. 1890.	
		Total ...	2,046	3	47,099	...	49,145	77		
Anantapur.	Gooty ...	Khojjapalle ...	367	...	...	...	367	...	... ...	
	Anantapur.	Anantapur ...	131	...	...	...	131	...	.....	
	Penukonda.	Narasampalle ...	1,280	...	...	...	1,280	...	.....	
		Kottakotá	5,120	...	...	...	5,120	...	.....	
	Hindupur...	Somarajmalai ...	1,920	...	...	...	1,920	...	.....	
		Total ...	8,818	*14	...	...	8,818	14		
Nilgiris.	Ootacamund.	Marliamund Plantation.	17	...	...	...	17	...	.....	
		Aramby	430	...	...	...	430	...	.....	
		Marliamund ...	194	...	...	...	194	...	.....	
		Cairn Hill	559	...	...	...	559	...	.....	
		Brooklands	177	...	...	...	177	...	.....	
		Lovedale	296	...	...	...	296	...	.....	
		Craigmore	299	...	...	...	299	...	.....	
		Doddabetta	991	...	...	...	991	...	.....	
		Snowdon	1,053	...	...	...	1,053	...	.....	
		Jakuntha	373	...	...	...	373	...	.....	
		Muthanád	420	...	...	...	420	...	.....	
		Governor's Shola ...	2,671	...	...	...	2,671	...	.....	
		Pykara	1,309	...	...	...	1,309	...	.....	
		Sandynullah ...	818	...	...	...	818	...	.....	
		Kengodu	451	...	...	...	451	...	.....	
		Karpakan	391	...	...	...	391	..	.....	
	Naduvatam.	Naduvatam Sholas...	1,501	...	...	...	1,501	...	.....	
		Vellingiri	643	...	...	...	643	...	.....	
		Kadcoopa	1,622	...	...	...	1,622	...	.....	
		Mukurti	8,953	...	...	...	8,953	...	.....	
		Northernhay ...	3,998	...	...	...	3,998	...	.....	
		Naduvatam ...	3,411	...	...	...	3,411	...	.....	
		Gadsbrook ...	230	...	...	...	230	...	.....	
		Cherambadi ...	1,983	...	...	...	1,983	...	.....	
		Ammankaval ...	563	...	...	...	563	...	.....	
	Melúr ...	Kundahs	40,521	...	...	...	40,521	...	.....	
		Mikkeru	1,267	...	...	...	1,267	...	.....	
		Thia Shola	1,551	...	...	...	1,551	...	.....	
		Hiriyashige... ...	2,175	...	...	...	2,175	...	.....	
		Devamalai	...	...	229	...	229	...	No. 213 of 27th May 1890.	
		Ithalar	460	...	...	...	460	...	.....	
		Deva Shola	215	...	...	...	215	...	.....	
		Balakola	935	...	...	...	935	..	.....	
		Athigarahatti ...	34	...	...	...	34	...	.....	
		Sutton Shola ...	52	...	...	...	52	...	.....	
		Commandu	993	...	...	...	993	.	.....	
		Pembroke	122	...	...	...	122	...	.....	
		Nedukaduhalla ...	...	...	885	...	885	...	No. 539 of 5th Dec. 1890.	
	Coonoor.	Hulikal	6,411	...	...	...	6,411	...	.....	
		Honnathalai ...	320	...	...	...	320	...	.....	
		Rallia	189	...	...	...	189	...	.....	
		Black Bridge ...	390	...	...	...	390	...	.....	
		Coonoor Peak ...	540	...	...	...	540	...	.....	

* Last year it was 13¾.

Area of Reserved Forests, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Nílgiris —*cont.*	Coonoor	Lamb's Rock ...	708	...	...	...	708	...	.....	
		Tiger Hill	328	...	...	...	328	...	.....	
		Ghát Reserve ...	311	...	...	...	311	...	.....	
		Hill Grove	187	...	...	...	187	...	.....	
		Kullar	1,815	...	...	...	1,815	...	.....	
	Kótagiri ...	Kótagiri	563	...	...	...	563	...	.....	
	Sígúr	Kalhatti Slopes ...	8,983	...	...	...	8,983	...	.....	
		Ebanad	571	...	...	...	571	...	.....	
	Mudumalai.	Benné	11,068	...	...	...	11,068	...	.....	
		Moyar	13,580	...	...	...	13,580	...	.....	
		Total ...	127,642	199½	1,114	...	128,756	201½		
		Grand Total ...	528,313	825	655,165	6,440	1,177,038	1,839		

Abstract.

District.	Area on 1st April 1890.	Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.
	SQ. MILES.	SQ. MILES.	SQ. MILES.	SQ. MILES.
Ganjam	18	67	...	85
Vizagapatam	14	...	§10	4
Godávari	*103	242	...	345
Kistna	69	277	...	346
Nellore	†53½	115	...	168½
Cuddapah	351	5	...	356
Kurnool	...	242	...	242
Bellary	3	74	...	77
Anantapur	‡14	...	...	14
Nílgiris	199½	2	...	201½
Total ...	825	1,024	10	1,839

* Last year it was 103½. † Last year it was 54½. ‡ Last year it was 13½. § Revised estimate of area.

ANNUAL FORM No. 59-B.

Forest Department, Madras, Northern Circle.

AREA of Forests Reserved under previous orders, 1890-91.

District.	Range.	Name of Forest.	AREA ON 1ST APRIL 1890.		ADDED DURING THE YEAR.	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 31ST MARCH 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Cuddapah.	Rayachóti...	Mudampad	3,200	...	...	...	3,200	...	.....	
	Proddatur.	Rameswaram ...	91	...	...	...	91	...	.....	
		Thullamapuram ...	153				153			
		Vellala	258				258			
		Alladapalle	197				197			
		Paydala	99				99			
		Kottapalli	120				120			
		Modumidapalle ...	86				86			
		Anantapuram ...	138				138			
		Kallur	160				160			
	Kadiri ...	Malakavemla ...	3,580	...	...	...	3,580	...	.....	
		Total ...	8,082	12½	...	...	8,082	12½		

Annual Form No. 59-C.

Forest Department, Madras, Northern Circle.

Area of Reserved Lands, 1890-91.

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Ganjam.	Bodoborosinghi.	Kaliamba .. S	5,200	...	...	...	5,200	...		
		Teleki ... S	15,200	...	...	...	15,200	...		
		Baibali	21,920	...	...	...	21,920	...		
		Vinjagheri S	6,000	...	...	* 6,000	..	...		
	Chokapad ...	Rogoda ... S	16,000	...	...	...	16,000	...		
		Darpangia ...	16,160	...	...	...	16,160	...		
		Rambha	9,300	...	...	...	9,300	...		
		Gullery	23,860	...	...	...	23,860	...		
		Koolada ... S	2,760	...	...	...	2,760	...		
	Gayagonda ...	Ambazara S	32,000	...	...	...	32,000	...		
		Chodiapalli S	960	...	...	...	960	...		
		Chondorgiri S	18,320	...	...	...	18,320	...		
		Gundribadi S	12,200	...	...	...	12,200	...		
		Gogodo ... S	15,240	...	...	...	15,240	...	Notfn. No. 199 of 13th Oct. 1884.	
	Jaganathprasad.	Paichalia ... S	13,760	...	...	...	13,760	...		
		Brahmanosai S	8,080	...	...	...	8,080	...		
		Jaganathprasad S	26,200	...	...	* 26,200	...	...		
	Buguda ...	Panchabuthi S	4,320	...	...	* 4,320	...	...		
		Kurcholi	5,520	...	...	...	5,520	...		
		Kriyamba	23,320	...	...	...	23,320	...		
		Sandusalya S	2,000	...	...	...	2,000	...		
		Bodochendana S	800	...	...	...	800	..		
		Vishnuchakram S	4,860	...	...	* 4,860	...	...		
	Pondokol ...	Dhougam ... S	2,400	...	...	...	2,400	...		
		Pipalapanka S	7,700	...	...	...	7,700	...		
		Moondapitta S	6,880	...	...	...	6,880	...		
		Hukuma	4,160	...	...	...	4,160	...		
		Rayigoda	6,700	...	...	...	6,700	...		
		Dabuki ... S	1,450	...	...	* 1,450	...	...	...	
	Berhampore...	Ramagodo ...	6,620	...	...	..	6,620	...	Notfn. No. 311 of 2nd Nov. 1885.	
		Bainamari ...	3,750	...	...	...	3,750	...		
		South Mohiri ...	3,730	...	...	...	3,730	...		
		Bollibogoda ...	261	...	...	...	261	...		
		Balakrishnapuram.	164	...	...	...	164	...		
		Chatrapur ...	695	...	...	...	695	...		
		Dura	279	...	...	...	279	...		
		Golabondo ...	379	...	...	...	379	...		
		Podhora	760	...	...	...	760	...		
		Mushidipolem ...	238	...	...	...	238	...		
		Kusimi	625	...	...	...	625	...		
		Bendaliya	163	...	...	...	163	...		
		Mohoda	419	...	...	...	419	...	Fuel and Fodder Reserves. Bd.'s Procs. No. F. 285 of 20th May 1887.	
		Mushiyakalli ...	522	...	...	...	522	...		
		Ankusapuram ..	138	...	...	...	138	...		
		Mohughora ...	1,697	...	...	...	1,697	...		
		Maharlapalli ...	924	...	...	...	924	...		
		Virakrishnachandrapuram.	445	...	...	...	445	...		
		Godohill	225	...	...	...	225	...		
		Joronohill ...	1,002	...	...	...	1,002	...		
		West Batukamarada.	179	...	...	...	179	...		
		Nimmapuram ...	697	...	...	...	697	...		
		Sikharapuram ...	260	...	...	...	260	...		
		Shapuram	142	...	...	...	142	...		
	Chicacole ...	Tuluga	...	...	148	...	148	...	Notfn. No. 304 of 12th July 1890.	
		Ampolu	...	...	225	...	225	...		
		Singupuram ...	...	...	693	...	693	...		
		Rana	...	...	107	...	107	...		
		Rahimanpuram ...	...	...	274	...	274	...		
		Koderu	...	...	279	...	279	...		
		Total ...	337,584	† 527½	1,726	42,830	296,480	463		

'S' denotes that the settlement is completed.

* Transferred to Form 59-A.

† Last year it was 527.

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Vizagapatam.	Golgonda ...	Arlova	1,500	...	...	...	1,500	...	Notfn. No. 316 of 22nd Oct. 1889.	
		Pedimkonda ...	1,000	...	...	...	1,000	...		
		Kakurlakonda ...	1,500	...	...	...	1,500	...		
		Yenkatapuram ...	1,500	...	...	...	1,500	...		
		Kodavalipudi ...	1,000	...	...	...	1,000	...		
		Total ...	6,500	*10	...	...	6,500	10		
Godávari.	Peddápur ...	Ragoovapatnam S	12,160	...	...	...	12,160	...	Notfn. No. 448 of 23rd Nov. 1886.	
		Sullanka ... S	17,920	...	...	...	17,920	...		
		Anantavaram S	8,320	...	...	...	8,320	...		
		Totapalle ... S	3,520	...	...	...	3,520	...		
		Oligogola ... S	20,800	...	...	...	20,800	...		
		Ramasaram ...	2,500	...	...	...	2,500	...	Notfn. No. 213 of 23rd May 1887.	
		Murari ... S	700	...	...	† 700	...	...	...	
		Kovida ... S	2,100	...	...	...	2,100	...	Notfn. No. 134 of 9th May 1888.	
		Banadapalli ...	6,800	...	...	...	6,800	...	Notfn. No. 281 of 1st Oct. 1889.	
		Lododdi	8,400	...	...	...	8,400	...		
		Vatangi	11,000	...	...	...	11,000	...		
		Aminbada ...	5,600	...	...	...	5,600	...		
		Anantagiri ...	3,900	...	...	...	3,900	...		
		Laburti	8,100	...	...	...	8,100	...		
		Doramamidi ..	7,200	...	...	...	7,200	...		
		Verabhadram ...	11,200	...	...	...	11,200	...		
		Jeddangi	6,700	...	...	...	6,700	...		
		Annavaram ...	10,500	..	...	...	10,500	...		
		Peddagurangi ...	5,800	...	...	...	5,800	...		
		Lingamparti ...	7,600	...	...	...	7,600	..		
		Devancheruvu S	5,000	...	...	...	5,000	...	Notfn. No. 308 of 26th July 1886.	
	Rajahmundry.	Lakkonda ...	13,000	...	...	...	13,000	...	Notfn. No. 282 of 1st Oct. 1889.	
		Molleru	10,000	...	...	...	10,000	...		
		Sudikonda ..	5,300	...	...	...	5,300	..		
		Mallavaram ...	6,500	...	...	...	6,500	...		
		Tirumalapalem ...	9,200	...	...	...	9,200	...		
		Mulkanapalli S	3,658	...	...	† 3,658	...	...	...	
		Dumagudiem S	6,110	...	...	† 6,110	...	...	...	
		Arlaguram S	6,136	...	...	† 6,136	...	...	...	
		Tunikicheruvu S	8,022	...	...	† 8,022	...	...	...	
		Bhadráchalam S	10,860	...	...	† 10,860	...	...	...	Last year the area of Badrachalam was wrongly entered against Tunikicheruvu, and *vice versâ*.
		Gogubaka ... S	1,666	...	...	† 1,666	...	...	...	
		Komanpalli S	3,250	...	...	† 3,250	...	...	...	
		Bandreo ... S	10,900	...	...	† 10,900	...	...	...	
		Golaguppa S	8,000	...	...	† 8,000	...	...	...	
		Narakonda S	7,500	...	...	† 7,500	...	...	...	
		Pengha ... S	4,400	...	...	† 4,400	...	...	...	
		Upanapalli S	3,300	...	...	† 3,300	...	...	...	
		Tatlunka ... S	12,000	..	...	† 12,000	...	...	...	
	Bhadráchalam.	Ramchandram S	10,300	...	...	† 10,300	...	...	...	
		Rapak ... S	7,000	...	...	† 7,000	...	...	...	
		Sitarampuram S	3,000	...	...	† 3,000	...	...	...	
		Bhandargudem S	7,100	...	...	† 7,100	...	...	...	
		Burkankota S	1,500	...	...	† 1,500	...	...	...	
		Kaler ... S	6,500	...	...	† 6,500	...	...	...	
		Nialakota ... S	2,500	...	...	† 2,500	...	...	...	
		Lakewaram S	6,500	...	...	† 6,500	...	...	...	
		Kanslur ... S	6,200	...	...	...	6,200	...	Notfn. No. 18 of 19th Dec. 1885.	
		Walsugri ... S	8,700	...	...	...	8,700	...	...	
		Rekapalle hills S	107,700	...	...	...	107,700	...	...	
		Velagalapalle Blocks I & II S	2,200	...	‡ 900	† 2,200	...	...	...	
		Chintalapudi S	1,100	...	...	† 2,000	...	...	...	
		Barrikonda S	3,500	...	...	† 3,500	...	...	...	
		Erraguntapalle S	8,640	...	...	† 8,640	...	...	...	
	Ellore ...	Bandamcherla S	5,200	...	...	† 5,200	...	...	...	
		Tadikalapudi S	2,500	...	...	† 2,500	...	...	...	
		Ramasingavaram S	1,920	...	...	...	1,920	...	Notfn. No. 210 of 23rd May 1887.	
		Ungutur Blocks I & II ...	4,500	...	...	...	4,500	...	Notfn. No. 145 of 21st May 1889.	

* Last year it was 10½. † Transferred to Form 59-A. ‡ Revised estimate of area.

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Godávari—*cont.*	Delta ...	Upputer	10,000	...	...	...	10,000	...	Notfn. No. 291 of 29th July 1887.	
		Kandikuppa ...	9,000	...	...	...	9,000	...	Notfn. No. 288 of 11th Oct. 1889.	
	Yernagúdem ...	Jilugumilli ...	3,300	...	...	...	3,300	...	Notfn. No. 285 of 1st Oct. 1889.	
		Narbhagudem ...	2,200	...	...	..	2,200	...		
		Barrinkalapadu ...	1,600	...	...	...	1,600	...		
		Thaduvai ...	1,900	...	...	...	1,900	...		
		Marlagudem ...	2,700	...	...	...	2,700	...		
		Beddadavele ..	15,000	...	...	...	15,000	...		
		Rajahmundram ...	400	..	...	...	400	...		
		Nallacherla ...	11,000	...	...	...	11,000	...		
		Kopilli	19,000	...	..	...	19,000	...		
		Kovada	19,000	...	..	...	19,000	...		
		Papikonda ...	..	...	21,000	...	21,000	...	Notfn. No. 395 of 29th Aug. 1890.	
		Total ...	587,282	*917½	21,900	154,942	454,240	709½		
Kistna.	Bezváda ...	Kondapalle †S	33,997	..	...	...	33,997	...	Notfn. No. 143 of 30th July 1884.	
		Kothur †S	7,593	..	700	..	8,293	...	Notfn. No. 181 of 22nd April 1890.	
		Budavada ... S	4,650	...	...	‡ 4,650	...	...	...	
		Jaggayapeta S	4,650	...	...	‡ 4,570, § 80	...	...	...	
		Kondúr ... S	3,000	..	...	...	3,000	...	Notfn. No. 351 of 11th Oct. 1887.	
	Guntúr ...	Kondavíd ... S	13,156	...	...	‡ 12,857, § 299	...	...	...	
		Tadepalle ... S	2,300	...	5	‡ 2,305	...	..	...	
		Kuragallu ... S	1,290	...	15	‡ 1,305	..	...	...	
		Narakodúr S	515	...	...	‡ 515	...	...	...	
		Kolakalúr	1,403	...	...	...	1,403	...	Notfn. No. 32 of 11th Jan. 1890.	
		Lam	..	...	987	...	987	...	Notfn. No. 359 of 7th Aug. 1890.	
		Gollamoodi ...	...	...	202	...	202	...	Notfn. No. 366 of 7th Aug. 1890.	
	Krosúr ...	Venkatayyapalem. † S	49,201	...	...	‡ 46,201	3,000	...	...	
		Nevalipur .. S	11,870	...	..	...	11,870	...	Notfn. No. 143 of 30th July 1884.	
	Vinukonda	Bollapalli Nos. I & II †S	49,712	..	2,288	‡ 40,000	12,000	..	..	
		Koppukonda ...	...	...	5,000	...	5,000	...	Notfn. No. 289 of 30th June 1890.	
		Guttikonda S	42,241	...	...	§ 4,481	37,760	...	...	
		Kakirala S	28,864	...	...	‡ 17,520, § 11,344	...	...	..	
	Palnád ...	Madinapadu S	9,600	...	...	‡ 9,600	...	...	...	
		Pasvemula S	22,782	...	...	...	22,782	...	Notfn. No. 143 of 30th July 1884.	
		Kandlagunta S	34,947	...	...	...	34,947	...		
		Tengeda ... II	...	...	1,395	...	1,395	...	Notfn. No. 226 of 3rd June 1890.	
		Tummurukodu II	...	...	2,940	...	2,940	...	Notfn. No. 212 of 27th May 1890.	
		Do. III	...	...	3,730	...	3,730	...		
		Mutukur ... S	31,408	...	...	§ 48	31,360	...	Notfn. No. 143 of 30th July 1884.	
	Bápatla ...	Muthayyapalem S	9,569	...	...	‡ 9,569	...	..	...	
		Pandhillapalli S	162	...	...	‡ 162	...	...	...	
		Wardarevu S	82	...	...	‡ 82	...	...	...	
		Nayanapalli S	156	...	...	§ 4	152	...	...	
		Vedhullapalle extension ...	...	...	10	...	10	...	Notfn. No. 232 of 4th June 1890.	
		Kottapalem, No. II. S	3,100	...	..	‡ 3,100	...	..	...	
		Orr's tope... ...	...	...	131	..	131	...	Notfn. No. 8 of 5th Jan. 1891.	
	Bandar ...	Yellichettidibba S	4,640	...	...	‡ 4,640	...	...	...	
		Nachugunta S	8,640	...	...	‡ 8,640	...	...	...	
		Sorlagundi S	2,880	...	...	‡ 2,880	...	...	...	
		Gollapalem S	390	...	...	‡ 390	...	...	...	
		Kodúr ... S	38	...	12	‡ 50	...	...	...	

* Last year it was 917. † Part only settled. ‡ Transferred to Form 59-A. § Revised estimate of area.

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Kistna—*cont.*	Bandar—*cont.*	Pulakayatippa S	2,880	...	...	...	2,880	...	Notfn. No. 91 of 8th Feb. 1887.	
		Bandar Fort S	7,500	...	...	* 7,500	...	...	...	
		Kanukollu S	667	...	...	* 667	...	...	...	
		Weld Reserve I, II	...	...	75	...	75	...	Notfn. No. 373 of 9th Aug. 1890.	
		Gopuvanipalem ...	...	...	206	...	206	...	Notfn. No. 490 of 6th Nov. 1890.	
		Total ...	393,883	† 615½	17,696	193,459	218,120	341		
Nellore.	Ongole ...	Chimakurthi ...	7,500	...	...	...	7,500	...	Notfn. No. 185 of 13th Oct. 1883.	
		Ongole ... S	200	...	...	* 60 ‡ 140	...	...	...	
	Kandukúr ...	Buddepudi S	500	...	...	* 500	...	...	...	
		Chakicherla S	323	...	...	* 323	...	...	...	
		Ramapatam S	1,516	...	...	* 1,516	...	...	...	
		Mocherla, Chalamcherla. S	12,290	...	...	‡ 54	12,236	...	Notfn. No. 96 of 15th Feb. 1887.	
		Gudlúr ... S	3,432	...	...	* 3,297 ‡ 135	...	...	...	
		Kávali	2,933	...	...	...	2,933	...	Board's Procs., No. 3216 / F. 647 of 24th Nov. 1885.	
		Kávali ... S	2,000	...	...	* 2,000	...	...	...	
	Kávali ...	Narayanapuram S	2,392	...	...	* 2,392	...	...	...	
		Kesavaram S	908	...	...	* 908	...	...	...	
		China Annalúr S	3,400	...	...	* 3,400	...	...	...	
		Tummalapenta N. & W. § S	3,560	...	‡ 20	* 2,280	1,300	...	Notfn. No. 97 of 15th Feb. 1887.	
		Bitragunta S	1,908	...	...	* 1,908	...	...	...	
		Nagalavaram S	414	...	...	* 414	...	...	...	
		Zakkepalle-Gudúr S	800	...	...	* 800	...	...	...	
		Chamadala S	750	...	...	* 750	...	...	...	
		Dundigam S	515	...	...	* 515	...	...	...	
		Mungamore ...	94	...	...	...	94	...	Board's Procs., No. 371 of 1st July 1887.	
		Kadanutla ...	289	...	...	...	289	...		
		Talapalem ...	761	...	...	...	761	...		
		Kávali	1,511	...	...	...	1,511	...		
		Kolladinne ...	561	...	...	...	561	...		
		Musunúr	1,014	...	...	...	1,014	...		
		Anamadugu ...	941	...	...	...	941	...		
		Chennayyapolliem.	1,161	...	...	...	1,161	...		
		Tummalapenta ...	2,476	...	...	...	2,476	...		
		Rudrakota ...	343	...	...	...	343	...		
	Kanigiri ...	Kanigiri-Durgam S	1,500	...	...	...	1,500	...	Notfn. No. 205 of 23rd Nov. 1883.	
		Nandavanam S	18,000	...	...	...	18,000	...	Notfn. No. 190 of 6th July 1885.	
		Vedullacheruvu ...	9,000	...	...	...	9,000	...		
	Udayagiri ...	Udayagiri-Durgam S	13,440	...	...	...	13,440	...	Notfn. No. 185 of 13th Oct. 1883.	
		Yerrakondas ...	14,080	...	...	...	14,080	...	Notfn. No. 238 of 22nd Oct. 1885.	
		Udayagiri (East) S Appasamudram.	1,000	...	‡ 500	...	1,500	...	Notfn. No. 243 of 1st July 1887.	
	Atmakúr and Udayagiri.	Udayagiri Veligondas.	60,140	...	...	...	60,140	...	Notfn. No. 164 of 10th June 1885.	
		Bommavaram S	3,000	...	...	* 3,000	...	...	...	
	Atmakúr ...	Turpukambhampadu. S	861	...	...	* 861	...	...	...	
	Atmakúr and Nellore.	Prabhagiripatnam S	2,500	...	...	* 2,500	...	...	...	

* Transferred to Form 59-A. † Last year it was 616. ‡ Revised estimate of area. § Part only settled.

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of Forest.		Area on 1st April. 1890. Acres.	Area on 1st April. 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Nellore—*cont.*	Nellore—*cont.*	Marripad ...	S	1,400	...	...	*1,400	...	...	...	
		Turimerla ...	S	620	...	...	*620	...	...	...	
		Dagadarti ...	S	2,866	...	...	*2,866	...	...	...	
		Kottapalli ..	S	4,230	...	...	*4,230	...	...	...	
		Vavveru ...	S	2,970	...	...	*2,970	...	...	...	
		Amancherla E. & W.	S	1,440	...	...	*1,440	...	...	...	
		Nellore	S	2,560	...	...	...	2,560	...	Notfn. No. 99 of 15th Feb. 1887.	
		Kondlapudi	S	1,440	...	†60	...	1,500	...		
		Allipuram ...	S	120	...	†5	*125	...	...		
		Stríharikota and its outliers.		35,710	...	...	...	35,710	...	Notfn. No. 185 of 13th Oct. 1883.	
		Kottapatam Plantation.	S	385	...	...	...	385	...	Notfn. No. 205 of 23rd Nov. 1883.	
		Yellasari	S	2,080	...	...	...	2,080	...	Notfn. No. 98 of 15th Feb. 1887.	
	Gúdúr ...	Ipuru ...	S	1,033	...	...	*1,033	...	...	...	
		Tamminapatnam, W.	S	800	...	...	†450	350	...	...	
		Momidi	S	2,040	...	†460	...	2,500	...	Notfn. No. 98 of 15th Feb. 1887.	
		Ankulapatur	S	240	...	...	*240	...	...	...	
		Pidatalapudi	S	750	...	...	*750	...	...	...	
		Kadivéd N. & S.	S	918	...	...	*918	...	...	...	
		Nellaballi	S	275	...	...	*275	...	...	...	
		Vedicherla	S	700	...	†150	...	850	...	Notfn. No. 98 of 15th Feb. 1887.	
		Madamanúr	S	560	...	...	*560	...	...	...	
		Sarvepalli ...	S	2,750	...	...	*2,750	...	...	...	
		Kanupur ...	S	1,974	...	...	*1,974	...	...	...	
		Kottapatam ...		2,500	...	...	...	2,500	...	Notfn. No. 98 of 15th Feb. 1887.	
		Turpupundla	S	1,000	...	...	*1,000	...	...	...	
		Sydapuram	S	2,080	...	...	...	2,080	...	Notfn. No. 100 of 15th Feb. 1887.	
		Chaganam	S	1,500	...	...	*1,500	...	...	...	
		Utukur ...	S	725	...	...	*725	...	...	...	
		Tummalatalpur	S	4,000	...	...	*4,000	...	...	...	
		Marlapudi ...		4,480	...	†70	...	4,550	...	Notfn. No. 100 of 15th Feb. 1887.	
		Pategunta	S	1,600	...	...	...	1,600	...		
		Paluru ...	S	400	...	...	†190	210	...		
		Chikavolu	S	1,100	...	...	*1,100	...	...	...	
		Cherlopalli	S	3,360	...	...	...	3,360	...	Notfn. No. 100 of 15th Feb. 1887.	
		Potukonda	S	2,240	...	...	†380	1,860	...		
		Guttikonda	S	160	...	†20	...	180	...		
		Marellakonda	S	520	...	...	†120	400	...		
		Veminabhi	S	2,080	...	...	...	2,080	...		
		Nellapalli	S	2,100	...	...	*2,100	...	...	...	
	Rápúr ...	Kakerlakonda	S	3,680	...	...	†1,830	1,850	...	...	
		Yerragondas	S	19,000	...	...	...	19,000	...	...	
		Vavintaparti	S	1,300	...	...	*1,300	...	...	...	
		Kummaragunta	S	480	...	...	†40	440	...	Notfn. No. 100 of 15th Feb. 1887.	
		Pulikollu ...	S	740	...	...	*740	...	...	...	
		Mogallur ...	S	957	...	...	*957	...	...	...	
		Duggunta ...	S	1,200	...	...	*1,200	...	...	...	
		Podalakur	S	1,920	...	†580	...	2,500	...	Notfn. No. 100 of 15th Feb. 1887.	
		Birdavolu ...	S	2,400	...	...	*2,250 †150	...	...	...	
		Vadlapudi ...	S	2,400	...	...	*2,400	...	...	...	
		Marupur ...	S	3,130	...	...	*3,130	...	...	...	
		Toderu ...	S	750	...	...	*750	...	...	...	
		Nernúr ...	S	2,400	...	...	...	2,400	...	Notfn. No. 100 of 15th Feb. 1887.	
		Chittalurú	S	515	...	...	*515	...	...	...	
		Ayyagaripalem	S	320	...	...	*320	...	...	...	
		Griddalúr ...	S	500	...	†200	...	700	...	Notfn. No. 506 of 5th July 1887.	
	Rápúr and Afmakúr.	Rápúr, Veligondas,	S	30,720	...	...	...	30,720	...	Notfn. No. 164 of 10th June 1885.	
		Total ...		348,181	‡ 544	2,065	77,051	273,145	427		

* Transferred to Form 59-A. † Revised Estimate of area. ‡ Last year it was 543¼.

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Cuddapah.	Kódúr ...	Settikunta ...	960	...	...	...	960	...	Collr.'s notice of 7th March 1885.	Left reserved land after settlement.
		Cheyavaram S	4,480	...	...	...	4,480	...	Notfn. No. 304 of 24th July 1886.	
		Kódúr	2,160	...	...	...	2,160	...	Collr.'s notice of 7th March 1885.	Do.
		Gotimanikona S	3,840	...	...	...	3,840	...	Notfn. No. 304 of 24th July 1886.	
		Yerraguntlakota ...	1,920	...	...	...	1,920	...	Collr.'s notice of 7th March 1885.	
		Avalapenta S	960	...	...	...	960	...	Notfn. No. 304 of 24th July 1886.	
		Mushtiyeru S	4,480	...	...	...	4,480	...		
		Tippayapalli S	960	...	...	...	960	...		
		Kodivengamabavi ...	2,400	...	...	...	2,400	...		
		Marriutla ... S	6,400	...	...	...	6,400	...		
		Reddipalle Plantation.	516	...	...	...	516	...	...	Do.
	Kódúr and Rájampet.	Seshachellam and Rollamadugu.	3,840	...	...	...	3,840	...	Collr.'s notice of 6th March 1884.	Do.
		Salivendra	6,400	...	...	...	6,400	...	...	Do.
	Rájampet ...	Chitvel ... S	10,240	...	...	...	10,240	...	Collr.'s notice of 6th March 1884.	
		Ananthasamudram .	6,400	...	...	...	6,400	...	Collr.'s notice of 7th March 1885.	
		Sanipaya ghat ...	2,560	...	...	...	2,560	...		
		Badugantapalle S	3,520	...	...	...	3,520	...	Notfn. No. 304 of 24th July 1886.	
		Vattalúr Hill ...	320	...	...	...	320	...	...	Do.
	Rájampet and Ráyachóti.	Gadikota	3,538	...	...	...	3,538	...	Collr.'s notice of 6th March 1884.	Do.
		Yerrakonda S	8,320	...	...	...	8,320	...	Notfn. No. 304 of 24th July 1886.	
		Sibbyala	340	...	...	...	340	...	...	Do.
		Tsundupalle ...	1,480	...	...	...	1,480	...	...	
	Sidhout, Rájampet and Ráyachóti.	Cheyer ... S	11,360	...	...	...	11,360	...	Notfn. No. 304 of 24th July 1886.	
	Rájampet and Sidhout.	Kanakalakonda S	6,400	...	...	...	6,400	...	Notfn. No. 54 of 14th March 1884.	
		Patur ... S	7,680	...	...	...	7,680	...		
		Kokaletikanama S	14,420	...	...	...	14,420	...	Notfn. No. 304 of 24th July 1886.	
		Kothur ... S	22,720	...	...	...	22,720	...		
	Sidhout ...	Malliamkonda ...	3,840	...	...	...	3,840	...	Collr.'s notice of 6th Dec. 1884.	Do.
		Do. addition. S	1,280	...	...	...	1,280	...	Notfn. No. 306 of 24th July 1886.	
		Vontimitta ...	5,760	...	...	...	5,760	...	Notfn. No. 54 of 14th March 1884.	
		Konarazupalle S	9,600	...	...	...	9,600	...		
		Turupukonda S	30,080	...	...	...	30,080	...	Notfn. No. 306 of 24th July 1886.	
		Ippakanama ...	1,600	...	...	...	1,600	...	Collr.'s notice of 7th March 1885.	
	Badvél and Sidhout.	Ramapuram S	7,680	...	...	...	7,680	...	Notfn. No. 54 of 14th March 1884.	
	Badvél ...	Kavalakuntla ...	1,600	...	...	...	1,600	...	...	Do.
		Gopavaram S	13,440	...	...	...	13,440	...	Notfn. No. 54 of 14th Mar. 1884.	
		Kottakota ... S	38,400	...	...	...	38,400	...		
		Kalasapad ... S	6,400	...	...	...	6,400	...	Notfn. No. 306 of 24th July 1886.	
		Sancherla ... S	5,760	...	...	...	5,760	...		
		Tsallagirigulla ...	1,280	...	...	...	1,280	...	Collr.'s notice of 17th March 1885.	
		Badvél	1,920	...	...	...	1,920	...		
		Ganugapenta ...	3,200	...	...	...	3,200	...	...	Do.

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Cuddapah—*cont.*	Cuddapah, Badvél and Sidhout.	Lankamalai S	112,640	...	...	...	112,640	..	Notfn. No. 54 of 14th Mar. 1884.	
	Cuddapah and Sidhout.	Kanamalapalle ...	5,255	....	....	...	5,255	...	...	Left reserved land after settlement.
	Badvél and Proddutur.	Dasaripalle S	66,560	...	...	...	66,560	...	Notfn. No. 54 of 14th Mar. 1884.	
	Cuddapah ...	Kanchelamoram S	8,960	...	...	...	8,960	...		
		Ganganapalle S	57,600	...	...	...	57,600	..	Collr.'s notice of 3rd Mar. 1885.	
		Chelakampalle ...	6,400	...	...	...	6,400	..		
		Kommaddi S	1,600	...	...	...	1,600	...		
		Tummalur S	3,200	...	...	...	3,200	...		
		Gonamakalapalle S	1,280	...	...	...	1,280	...		
	Proddutur and Pulivendla.	Bhanakotamala S	13,600	...	....	...	13,600	...		
		Mallela .. S	5,120	...	...	...	5,120	...		
	Proddutur ...	Kondasankesula S	4,480	...	...	...	4,480	...		
		Dabbudapalle S	3,280	...	...	...	3,280	...		
		Dhodiyam ... S	2,720	...	...	...	2,720	...	Notfn. No. 304 of 24th July 1886.	
		Malamidikamba-ladinne. S	3,440	...	...	...	3,440	...		
		Penner ... S	640	...	...	...	640	...		
		Gandikota ... S	9,920	...	...	...	9,920	...		
		Yamavaram S	1,600	...	...	...	1,600	...		
		Kosinepalle S	7,040	...	...	...	7,040	...		
		Nidijuvvi ... S	2,880	...	...	...	2,880	...		
		Kondapuram S	3,840	...	...	...	3,840	...		
	Cuddapah and Ráyachóti.	Idupalapaya S	28,160	...	...	...	28,160	...	Notfn. of 11th June 1883.	
		Redlacheruvu S	5,120	...	...	...	5,120	...	Notfn. No. 304 of 24th July 1886.	
	Cuddapah and Sidhout.	Palkonda ... S	81,920	...	...	...	81,920	...	Notfn. of 11th June 1883.	
	Ráyachóti ...	Madhavaram S	5,900	...	...	...	5,900	..	Notfn. No. 54 of 14th Mar. 1884.	
		Vandadi Hills S	3,400	...	....	{ *3,390 †10 }	...	...		
		Brahmanayerragudi	5,760	...	...	...	5,760	...	Collr.'s notice of 7th Mar. 1885.	
		Hassanapuram ...	12,160	...	...	...	12,160	...		
		Mudumpad slopes...	5,760	...	....	...	5,760	...		
		Wongimalla S	10,880	...	...	...	10,880	...	Notfn. No. 306 of 24th July 1886.	
	Ráyachóti and Váyalpád.	Urukonda	8,960	...	...	...	8,960	...		
		Rekkalakonda ...	6,400	...	....	...	6,400	...		
	Kadiri and Pulivendla.	Gorivikanama S	28,800	...	...	...	28,800	...		
		Dorigallu S	30,720	...	...	...	30,720	...	Notfn. No. 54 of 14th Mar. 1884.	
		Ishwaramala S	15,360	...	...	...	15,360	...		
		Kokanti S	2,000	...	...	...	2,000	....		
		Kadiri S	10,240	...	...	...	10,240	...		
		Vellichelamalla S	3,200	...	...	...	3,200	...	Notfn. No. 305 of 24th July 1886.	
		Thirumaladevara-konda. S	9,600	...	...	...	9,600	...	Notfn. No. 54 of 14th Mar. 1884.	
		Nigadi S	19,640	...	...	...	19,640	...	Notfn. No. 305 of 24th July, 1886.	
	Kadiri ...	Kukkarazukonda S	5,120	...	...	...	5,120	...		
		Tumala S	25,600	...	...	...	25,600	...		
		Malakavemala S	1,920	...	...	...	1,920	...	Notfn. No. 54 of 14th Mar. 1884.	
		Tummalamala S	6,400	...	...	...	6,400	...		
		Kondagamerla S	3,200	...	...	...	3,200	...		
		Somarazumala, East S	1,280	...	...	...	1,280	...		
		Goduvelagala S	1,920	...	...	...	1,920	...	Notfn. No. 305 of 24th July 1886.	
		Mudupalajuvi S	1,440	...	...	...	1,440	...		
	Madanapalle...	Tavalam S	5,120	...	...	...	5,120	...		
		Madhanikonda S	1,750	...	...	...	1,750	...		
		Pentzupad S	2,870	...	....	...	2,870	...	Notfn. No. 54 of 14th Mar. 1884.	
		Horsleykonda S	23,870	...	...	...	23,870	...		
		Mothugamala S	2,560	...	...	...	2,560	...		

* Transferred to Form 59-A. † Revised estimate of area.

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Cuddapah—*cont.*		Mallaiakonda S	15,023	...	...	...	15,023	...	Notfn. No. 54 of 14th March 1884.	
	Madanapalle...	Nallakonda S	3,200	...	...	...	3,200	...		
		Pulikonda ... S	2,560	...	...	...	2,560	...	Notfn. No. 305 of 24th July 1886.	
		Potapolu ... S	364	...	...	...	364	...		
		Kukarazupalle S	1,660	...	...	...	1,660	...		
	Váyalpád and Madanapalle.	Tarikonda	6,400	...	...	...	6,400	...		
		Gutapaliem S	2,560	...	...	...	2,560	...		
		Yellutla	4,840	...	...	...	4,840	...	Notfn. No. 54 of 14th March 1884.	Left reserved land after settlement.
		Gajjbuchikona S	320	...	...	...	320	...		
		Yerramorallajedu S	3,680	...	...	...	3,680	...		
		Ankalammakonda S	2,800	...	...	...	2,800	...		
		Nurukupalakonda S	8,820	...	...	...	8,820	...		
	Váyalpád ...	Doddipalle S	2,560	...	...	...	2,560	...	Notfn. No. 306 of 24th July 1886.	
		Sorakayalapeta ...	2,560	...	...	...	2,560	...		
		Peddamallela S	3,200	...	...	...	3,200	...		
		Marella ... S	7,680	...	...	...	7,680	...		
		Talakona ... S	19,840	...	...	...	19,840	...		
		Bhakarapet ...	9,800	...	...	...	9,800	...		
		Total ...	1,067,406	1,668	...	3,400	1,064,006	1,663		
Kurnool.	Sirvél and Nandyál.	Sirvél ... S	128,000	...	...	*116,730 †11,270	...	...	...	
	Nandyál and Nandikótkur.	Nandyál ... S	192,000	...	...	†6,300	185,700	...	Notfn. of 21st April 1883.	
	Nandikótkur ...	Nandikótkur S	256,000	...	†112,770	...	368,770	..		
	Cumbum ...	Uyyalavada S	448,000	...	† 7,055	...	56,180 217,000 181,875	...	Notfn. No. 198 of 17th Nov. 1883.	
	Cumbum and Márkápur.	Cumbum ... S								
	Márkápur ...	Márkápur ... S								
	Cumbum ...	Northern Veligondas S	19,200	...	† 2,340	* 21,540	...	...		
		Southern do. S	19,200	...	...	*16,755 †2,445	...	...		
		Western do. ...	10,880	...	† 6,330	...	17,210	...	Notfn. No. 199 of 17th Nov. 1883.	
	Ramallakota...	Ramallakota E.&W. S	2,000	...	...	...	2,000	...	Notfn. No. 74 of 6th March 1888.	
		Lanjabanda S	2,000	...	...	...	2,000	...		
		Yaipalapad ...	3,500	...	...	...	3,500	...		
		Gadithemadugu S	3,000	...	...	...	3,000	...		
	Pattikonda and Ramallakota.	North Dhone ...	10,000	...	...	...	10,000	...		
		South Dhone. S	4,000	...	...	...	4,000	...		
		Total ...	1,097,780	†1,715	128,495	175,040	1,051,235	1,642½		
Bellary.	Ádóni ...	Ganekolu ... S	1,118	...	...	...	1,118	...	Notfn. No. 175 of 16th Sept. 1884.	
		Badenahalu S	940	...	...	...	940	...		
		Katalam ... S	658	...	...	...	658	...		
		Halekota ... S	438	...	...	* 438	...	...		
		Sulekeri	1,342	...	...	...	1,342	...	Do.	
		Halevy ... S	1,209	...	...	* 1,209	...	...		
		Nundavaram S	969	...	...	...	969	...		
		Ráyachóti ... S	1,863	...	...	...	1,863	...		
		Kurimetla ...	3,341	...	...	...	3,341	...		
		Bunivasi ... S	1,964	...	...	...	1,964	...		
		Kotekallu	2,569	...	...	...	2,569	...		
		Adóni E.&W. ...	5,000	...	†337	...	5,337	...	Notfn. No. 175 of 16th Sept. 1884.	
		Kupgul	4,650	...	...	...	4,650	...		
		Tungabhadra ...	4633	...	...	...	4,633	...		
		Kosgi	2,970	...	...	...	2,970	...		
		Kudbúr	2,956	...	...	...	2,956	...		
	Alúr ...	Gummanur N.W.S.	248	...	...	* 244 †4	...	...	...	
		Do. N.E. S	332	...	...	* 332	...	...	...	
		Do. N. S	69	...	†1	*70	...	...	...	

* Transferred to Form 59-A. † Revised estimate of area. ‡ Last year it was 1,715½.

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Bellary—*cont.*	Alúr—*cont.* ...	Chippigiri W. S	281	...	†1	* 282	...	...	...	
		Do. S. S	416	...	†1	* 417	...	...	...	
		Do. S.E. S	485	...	...	* 461 † 24	..	...	...	
		Degalahalu S	110	...	...	* 110	...	...	...	
		Yeruru S.W. S	56	...	†1	* 57	...	...	...	
		Do. S. S	311	...	..	* 308 † 3	...	...	...	
		Do. W. S	157	...	...	* 157	...	...	...	
	Bellary ...	Bellary S	8,000	...	...	* 8,000	...	...	...	
		Mincheri ... S	4,000	...	...	* 4,000	...	...	...	
		Kurrugodu W. & N.W. S	1,000	...	...	...	1,000	...	Notfn. No. 163 of 10th June 1889.	
	Bellary ...	Tekkalakota S	600	...	...	* 600	...	...	...	
		Suguru	500	...	...	...	500	..	Notfn. No. 163 of 10th June 1889.	
		Nadivi	450	..	...	...	450	..		
		Halekota ... S	640	...	...	...	640	...		
		Vonnahalli ...	...	...	111	...	111	...	Notfn. No. 104 of 11th Mar. 1891.	
		Mundrigi	...	...	80	...	80	...		
		Gundu ... S	3,000	...	† 2,456	...	5,456	...	...	
		Hospet	5,000	...	...	...	5,000	...	Notfn. No. 197 of 16th Nov. 1883.	
	Hospet ...	Joga ... S	4,000	...	...	* 3,264 † 736	...	...	...	
		Oblagudi ... S	1,000	...	...	† 308	692	...	Notfn. No. 197 of 16th Nov. 1883.	
		Tornagallu S	2,100	...	...	* 2,100	..	...	...	
		Billekal	14,080	...	...	...	14,080	...	Notfn. No. 22 of 21st Jan. 1889.	
		Buckasagar ...	6,000	...	...	...	6,000	...		
	Kúdligi and Hospet.	Bandri	7,000	...	...	...	7,000	...	Notfn. No. 197 of 16th Nov. 1883.	
	Kudligi ...	Chiribi ... S	3,000	...	...	* 3,000	...	...	...	
		Tambaragudi S	2,500	...	...	* 2,500	...	...	...	
		Somalapuram S	2,600	...	...	* 2,600	...	...	...	
		Sunkadakal S	7,843	...	...	* 7,000 † 843	...	...	...	
		Shivapuram S	9,000	...	...	* 9,000	...	...	...	
		Banivikal	3,000	...	...	...	3,000	...	Notfn. No. 79 of 26th Mar. 1889.	
		Nimblagiri ..	4,800	...	...	...	4,800	...		
		Gudekota	7,000	...	...	...	7,000	...		
		Sunkadakal East ...	...	...	843	...	843	...	Notfn. No. 538 of 8th Dec. 1890.	
	Hadgalli and Harpanhalli.	Harada ... S	18,000	...	...	† 1,600	16,400	..	Notfn. No. 79 of 14th Jan. 1883.	
		Sogay	4,200	...	...	...	4,200	...		
	Harpanhalli ...	Jitnakatta ...	12,646	...	...	...	12,646	...	Notfn. No. 116 of 20th April 1888.	
		Jangukalgutta ...	12,882	...	...	...	12,882	...		
		Alagilavada ...	1,956	...	...	...	1,956	...		
		Uchingidrug ...	4,291	...	...	...	4,291	...		
	Ráyadrug ...	Ráyadrug ... S	6,000	...	...	...	6,000	...	Notfn. No. 150 of 21st May 1885.	
		Dharmapuri S	3,600	...	† 500	...	4,100	...		
		Adugappa S	950	...	...	* 950	...	...	...	
		Boodikonda S	1,000	...	...	...	1,000	...	Notfn. No. 157 of 8th June 1888.	
	Sandúr	Sandúr	40,000	...	...	...	40,000	...	...	Leased Forest.
		Total ...	201,723 40,000	315 62½	4,331	50,617	1,55,437 40,000	243 62½	... ...	 Leased Forest.
Anantapur.	Gooty ...	Peddadoddi ...	3,200	...	...	...	3,200	...	Notfn. No. 203 of 20th May 1887.	
		Jakkalacheruvu ...	3,200	...	...	...	3,200	...		
		Pamidi ... S	640	...	...	...	640	...		
		Nagasamudram N. & S.	9,600	...	...	...	9,600	...		
		Cutturmulla ...	7,680	...	...	...	7,680	...		
		Bhadrampalle ...	2,560	...	...	...	2,560	...		
		Marutla	11,520	...	...	...	11,520	..		
		Tarramalla ...	8,960	...	...	...	8,960	...		
		Yadaki	5,120	...	...	...	5,120	...	Notfn. No. 134 of 28th Feb. 1887.	
		Guntakal I, II. & III.	900	...	...	...	900	...	Notfn. No. 252 of 13th Aug. 1889.	
		Muchukota S	6,400	...	...	...	6,400	...	Notfn. No. 191 of 6th Oct. 1884.	

* Transferred to Form 59-A. † Revised estimate of area.

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Anantapur—*cont.*	Muchukota	Durgam ... S	3,200	...	...	...	3,200	...	Notfn. No. 205 of 20th May 1887.	
		Kudair ... S	4,480	...	...	...	4,480	...		
		Uparapalli S	640	...	...	...	640	...		
		Dadithota	1,920	...	...	...	1,920	..		
		Yellutla	5,120	...	...	...	5,120	...		
		Chillawaripalle .	3,840	...	...	...	3,840	...	Notfn. No. 134 of 28th Feb. 1887.	
		Konakuntla ...	1,280	...	...	...	1,280	..		
		Nairjampalle ...	1,920	...	...	...	1,920	...		
		Yelanur	320	...	...	...	320	...		
		Gootoor E.&W. S	6,400	...	...	...	6,400	...	Notfn. No. 166 of 8th May 1886.	
	Dharmavaram.	Boodikonda * ...	...	...	320	...	320	...	Notfn. No. 157 of 12th June 1888.	
		Kalyándrúg N.&S.S.	960	...	...	...	960	...	Notfn. No. 8 of 22nd Dec. 1886.	
		Ramgherry ...	10,240	...	...	...	10,240	...		
		Bhadrapur S	3,200	...	...	...	3,200	...		
		Nayalakota S	7,680	...	...	...	7,680	...	Notfn. No. 166 of 8th May 1886.	
		Penukonda Hill S	1,600	...	...	..	1,600	...		
		Somandapally S	10,240	..	...	...	10,240	...		
		Yerlampalle S	2,240	...	...	...	2,240	...		
		Mallappakonda S	5,120	...	...	...	5,120	...	Notfn. No. 166 of 8th May 1886.	
	Penukonda ...	Mallakaveimla-konda. S	960	..	.	...	960	...		
		Naradikonda S	2,560	...	...	...	2,560	...	Notfn. No. 74 of 26th Oct. 1888.	
		Janavaripalle ...	3,200	...	...	...	3,200	...		
		Agraharam ...	2,300	...	...	...	2,300	...		
		Venglumcheruvu.	2,880	...	...	...	2,880	...		
		Yerrakonda S	4,420	...	...	...	4,420	...	Notfn. No. 166 of 8th May 1886.	
		Amagondapalium S	16,360	...	...	...	16,360	...		
	Hindupur ...	Dokulkonda S	2,880	...	...	...	2,880	...		
		Kondur	400	...	...	...	400	..	Notfn. No. 232 of 8th Aug. 1888.	
		Gopidevarapalle S	1,920	...	...	...	1,920	...		
		Total ...	168,060	262½	320	...	168,380	263		
Nilgiris.	Ootacamund...	Fern Hill Shola S	10	...	...	...	10	...	Notfn. No. 428 of 8th Nov. 1886.	
		Addition to Fair-lawns block No. I. S	22	...	...	...	22	...		
		Addition to Dodda-betta block No. II. S	12	...	...	..	12	...		
		Addition to Doddahalla. S	10	...	...	...	10	...		
		Bilikal road S	25	...	...	...	25	...		
		Nanjanad ...	...	...	888	...	888	...	Notfn. No. 156 of 19th Mar. 1890.	
		Red Hills ...	...	...	50	...	50	...		
		Keradamand ...	...	...	276	...	276	...		
		Welbeck ...	...	...	66	...	66	...		
	Naduvatam ...	Devamalai S	229	...	...	† 229	...	...	Notfn. No. 213 of 27th May 1890.	
	Sigúr	Sigúr	41,127	...	...	...	41,127	...	Notfn. No. 54 of 24th May 1885.	
		Mudumalai ...	46,639	...	...	...	46,639	...	...	Leased forest.
	Coonoor ...	Honnathalai (South). S	218	...	...	...	218	...	Notfn. No 168 of 20th April 1886.	
		Bettumund S	137	...	...	...	137	..		
		Rallia ... S	385	...	...	..	385	...		
		Little Rallia S	29	..	...	...	29	...		
		Rallia Shola S	30	...	...	...	30	...		
		Halakaray S	172	...	...	...	172	...		
		Teppakuchi S	119	...	...	...	119	...		
		Billithittu ... S	35	...	...	...	35	...		
		Dolphin ... S	65	...	...	...	65	...		
		Guernsey ... S	14	...	...	...	14	...		
		Kodámálai S	15	...	...	...	15	...		
		Pillur Slopes ...	...	...	2,332	...	2,332	...	Notfn. No. 156 of 19th Mar. 1890.	
		Pakasuramalai ...	...	...	625	...	625	...		
		Pillur Shola ...	...	...	39	...	39	...		
		Kulear ...	...	..	226	...	226	...		
	Kótagiri ...	Naduhatti S	476	...	...	...	476	...	Notfn. No. 168 of 20th April 1886.	
		St. Catherine's Fall S	124	...	...	...	124	...		
		Constantia S	35	...	...	...	35	...		
		Tuttapolliam S	54	...	...	...	54	...		
		Gudakalhalla S	299	...	...	...	299	...		

* Omitted in the previous year's return.

† Transferred to Form 59-A.

Area of Reserved Lands, 1890-91—*cont.*

District.	Range.	Name of Forest.		Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Nilgiris—*cont.*	Kotagiri—*cont.*	Bettu Nos. 1 and 2	S	29	...	...	...	29	...		
		Kunnavara addition.	S	97	...	...	...	97	...		
		Kanavatti ...	S	16	...	...	...	16	...		
		Deepdale ...	S	361	...	...	...	361	...		
		Gudakal ...	S	600	...	...	...	600	...		
		Clyffe ...	S	33	...	...	...	33	...		
		Yercaudhalla	S	20	...	...	...	20	..		
		Konakarai Slopes	S	1,864	...	...	...	1,864	...		
		Dodabetta	S	105	...	...	...	105	...		
		Shamrock ..	S	43	...	...	...	43	...		
		Bikkehatti	S	19	...	...	...	19	...		
		Ittakal, Nos. 1 and 2.	S	21	...	...	...	21	...		
		Mavada ...	S	211	...	...	...	211	...	Notfn. No. 168 of 20th April 1886.	
		Kuttada, Nos. 1 and 2.	S	29	...	...	...	29	...		
		Vagapanai ...	S	2,648	...	...	...	2,648	...		
		Denad ...	S	2,073	...	...	...	2,073	...		
		Sundatti ...	S	124	...	...	...	124	...		
		Kunshola ...	S	159	...	...	...	159	...		
		Kirkanara, Nos. 1 and 2.	S	24	...	...	...	24	...		
		Kellatti ...	S	17	..	...	...	17	...		
		Hadumund	S	48	...	...	...	48	...		
		Uppatti ...	S	53	...	...	...	53	...		
		Doddakavu	S	62	...	...	...	62	...		
		Ullavanad Shola	S	57	...	...	...	57	...		
		Sinnattu Shola	S	51	...	...	...	51	...		
		Madanad ...	S	723	...	...	...	723	...		
		Kódanad Valley	S	294	...	...	..	294	...		
		Nadukaduhalla	S	885	...	...	* 885	...	...	Notfn. No. 539 of 5th Dec. 1890.	
		Nedugula ...	S	89	...	...	...	89	...	Notfn. No. 168 of 20th April 1886.	
		Longwood additions.	S	31	...	...	...	31	...		
	Melúr ...	Bigulihalla ...		...	...	46	...	46	...	Notfn. No. 156 of 19th Mar. 1890.	
		Yadakad ...		...	...	117	...	117	...		
		Sutton Shola addition ...		...	...	36	...	36	...		
		Kolokombe ...		...	...	830	...	830	...		
		Taimalai Shola ...		...	..	43	...	43	...		
		Tudur		...	...	24	...	24	...		
		Melúr Slopes ...		...	...	4,429	...	4,429	...		
		Osatti		...	...	152	...	152	...		
		Koderu ...		...	...	21	...	21	...		
		Kilur		...	...	9	...	9	...		
	Kullár ...	Kullár additions I. & II.	S	72	...	...	...	72	...	Notfn. No. 168 of 20th April 1886.	
		Benhope, No. 2	S	34	...	...	...	34	...		
		Jakanare Slopes	S	6,419	...	...	...	6,419	...		
		Kallúr ...	S	388	...	...	...	388	...		
		Total ...		61,341 46,639	96 73	10,209	1,114	70,436 46,639	110 73		
		Grand Total ...		4,269,690 86,639	6,671 135½	186,742	698,453	3,757,979 86,639	5,872 135½		

ABSTRACT.

District.	Area on 1st April 1890.	Added during the year.		Transferred to Form 59A.	Excluded at settlement or on revised estimate of area.	Area on 31st March 1891.	Remarks.
		Fresh blocks.	Revised estimate of area.				
	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	
Ganjam	527½	2½	...	67	...	463	
Vizagapatam	10	...	...	...	...	10	
Godávari	917½	33	1	242	...	709½	
Kistna	615½	24	3½	277	25	341	
Nellore	544	...	3	115	5	427	
Cuddapah	1,668	...	...	5	...	1,663	
Kurnool	1,715	...	201	242	31½	1,642½	
Bellary	315	1½	5½	74	5	243	
	62½	...	...	...	...	62½	Leased forest.
Anantapur	262½	½	...	...	...	263	
Nílgiris	96	16	...	2	...	110	
	73	...	...	...	...	73	Leased forest.
Total ...	6,671	77½	214	1,024	66½	5,872	
	135½	...	...	...	...	135½	Leased forest.

Annual Form No. 59-D.

Forest Department, Madras, Northern Circle.

Area of Reserved Forests under other orders, 1890-91.

District.	Range.	Name of Forest.	Area on 1st April 1890.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1891.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Vizagapatam.	Pálkonda ...	Rupayi ..	300	...	...	...	300	...	Collector's order, dated 1st Aug. 1888.	
		Donabayi ...	20	...	...	...	20	...		
		Mekava ...	1,500	...	...	...	1,500	...		
		Yegalada ..	259	...	...	...	250	...		
		Kusumuru ...	3,500	...	...	...	3,500	...		
		Gumpayi ..	1,500	...	...	...	1,500	...		
		Barna ..	4,500	...	...	..	4,500	...		
		Antikonda ...	3,000	...	...	...	3,000	...		
		Samaralli ...	20	...	...	...	20	...		
		Sumbakonda ...	10	...	...	...	10	...		
		Total ...	14,600	23	...	...	14,600	23		

Annual Form No. 60.

Forest Department, Madras, Northern Circle.

Area of Plantations, 1890-91.

District.	Number of Plantations.	On 1st April 1890.		Added during 1890-91.		On 31st March 1891.		Remarks.
		Area.	Cost.	Area.	Cost.	Area.	Cost.	
		Acs.	Rs.	Acs.	Rs.	Acs.	Rs.	
Regular Plantations—								
Ganjam	...	...	...	...	...	...	...	
Vizagapatam	...	...	...	...	...	...	...	
Godávari	4	119	8,249	8	838	127	9,087	
Kistna	16	757	23,256	25	1,858	782	25,114	
Nellore	11	2,716	2,43,125	100	3,323	2,816	2,46,448	
Cuddapah	8	2,100	50,145	...	890	2,100	51,035	
Kurnool	...	...	...	...	...	...	...	
Bellary	...	...	...	...	...	...	...	
Anantapur	...	...	...	...	...	...	...	
Nílgiris	18	1,827¾	1,10,975 *—148	36¾	3,791	1,864½	1,14,766	
Direction	...	...	...	...	...	...	...	
Total ...	57	7,519¾	4,35,750 *—148	169¾	10,700	7,689½	4,46,450	* See under cultural operations.
Cultural operations—								
Direction	...	...	148	...	112	...	260	
Ganjam	3	...	763	565	917	565	1,680	
Vizagapatam	...	...	...	...	...	...	...	
Godávari	...	...	...	...	...	...	...	
Kistna	4	..	349	...	889	...	1,238	
Nellore	8	545	2,497	172	711	717	3,208	
Cuddapah	14	585	2,400	...	258	585	2,658	
Kurnool	...	...	82	...	...	...	82	
Bellary	4	...	399	...	61 † — 30	...	430	† 2 abandoned.
Anantapur	5	...	...	52⅛	610	52⅛	610	
Nílgiris	5	41½	5,475	4	1,158	45½	6,633	
Total ...	43	1,171½	12,113	793⅛	4,716 — 30	1,964⅛	16,799	

ANNUAL FORM No. 61.

Forest Department, Madras, Northern Circle.

LIST of Topes, 1890-91.

District.	Number.	Area.	Cost		Remarks.
			During year.	To end of year.	
		ACS.	RS.	RS.	
Ganjam	7	101	...	922	
Vizagapatam...	2	56	...	14	
Godávari	..	...	...	..	
Kistna	*7	53	258	2,072	* 1 constituted during the year, 3 acres.
Nellore	111	1,752	...	38,044	
Cuddapah	72	1,629	1,134	57,781	1 constituted during the year in Cuddapah Taluk, 40 acres.
Kurnool	27	182	267	9,368	
Bellary	31	240	177	1,037	
Anantapur	95	2,885	544	4,903	
Nílgiris	...	...	...	...	
Total ...	352	6,898	2,380	1,14,141	

Forest Department, Madras, Northern Circle.

ABSTRACT of Form No. 62 showing by districts the area of forest tracts protected from fire during 1890-91.

District.	AREA PROTECTED DURING 1889-90.		DURING DRY SEASON OF 1890-91.				Total cost up to 31st March 1891.	Remarks.
	Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.		
	ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.	
Ganjam	320,960	4,278	331,505	14,277	317,228	1,316	5,594	
Vizagapatam	23,520	225	17,120	...	17,120	402	627	
Godávari	126,286	872	126,746	490	126,256	650	1,522	
Kistna	97,022	4,628	136,113	1,882	134,231	1,071	5,699	
Nellore	68,280	2,380	117,860	2,580	115,280	848	3,228	
Cuddapah	432,114 / -23,972	30,963	523,850	25,244	498,606	6,168	37,131	
Kurnool	36,657	4,289	44,440	16,100	28,340	1,834	6,123	
Bellary	230,023	16,274	244,390	15,924	228,466	2,192	18,466	
Anantapur	57,048	8,108	80,218	22	80,196	2,028	10,136	
Nílgiris	207,678	16,460	223,087	52,142	170,945	2,730	19,190	
Total ...	1,599,588 / —23,972	88,477	1,845,329	128,661	1,716,668	19,239	1,07,716	

Annual Form No. 63.

Forest Department, Madras, Northern Circle.

Prosecutions for Breaches of Forest Rules during 1890-91.

District.	Cases pending from 1889-90.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Ganjam ...	8	3	56	2	4	65	73	4	30	9	12	13	42	60
Vizagapatam ...	31	...	463	8	1	472	503	292	321	41	110	333	431	170
Godávari ...	3	...	104	23	4	131	134	43	71	22	47	65	118	69
Kistna ...	50	2	65	61	25	153	203	133	349	22 *19	65	155 *19	414	29
Nellore ...	17	...	38	6	...	44	61	33	122	8	60	41	182	20
Cuddapah ...	24	5	77	44	13	139	163	115	328	26	163	141	491	22
Kurnool ...	1	2	171	31	16	220	221	117	224	85	374	202	598	19
Bellary ...	4	...	43	2	9	54	58	33	73	23	103	56	176	2
Anantapur ...	7	2	51	21	6	80	87	69	114	6	13	75	127	12
Nílgiris ...	...	...	5	1	...	6	6	2	14	1	3	3	17	3
Total ...	145	14	1,073	199	78	1,364	1,509	841	1,646	262	950	1,103	2,596	406

Cases compounded under section 55 of the Madras Forest Act.

														Amount for which compounded.
														Rs.
Ganjam ...	†...	...	19	2	...	21	21	21	46	...	...	21	46	602
Vizagapatam ...	...	...	135	34	...	169	169	169	189	...	..	169	189	493
Godávari ...	...	...	4	...	1	5	5	5	9	...	...	5	9	22
Kistna ...	...	9	83	7	5 ‡1	105	105	103	223	2	7	105	230	624
Nellore ...	...	...	8	...	...	8	8	8	19	...	...	8	19	51
Cuddapah ...	...	1	82	20	15	118	118	118	337	...	...	118	337	1,030
Kurnool ...	...	...	47	17	6	70	70	70	319	...	...	70	319	1,852
Bellary ...	...	...	22	...	...	22	22	22	60	...	...	22	60	65
Anantapur ...	...	...	9	2	...	11	11	11	24	...	...	11	24	150
Nílgiris ...	...	...	8	4	...	12	12	12	56	...	...	12	56	196
Total ...	...	10	417	86	28	541	541	539	1,282	2	7	541	1,289	5,085

* Of these 19, 18 cases were withdrawn while one was transferred to the list of cases compounded.

† It is explained by the District Forest Officer that 13 cases shown as pending at the close of the year 1889-90 was a mistake.

‡ Transferred from the List of Prosecutions.

ANNUAL FORM No. 64.

Forest Department, Madras, Northern Circle.

SUMMARY of Revenue of the different districts, 1890-91.

Budget heads, Receipts.	Direction.	Ganjam.	Vizagapatam.	Godávari	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nílgiris.	Total.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I.—Timber and other produce removed from the forests by Government Agency—												
(*a*) Timber	...	12,223	...	5,876	33	...	18,085	...	...	132	5,692	42,041
(*b*) Firewood and charcoal	...	2,921	...	1,136	598	25,301	202	44,336	490	228	20,528	95,740
(*c*) Bamboos	...	36	...	...	...	...	90	...	932	740	...	1,798
(*d*) Sandalwood	...	...	...	...	...	...	...	...	...	...	11,229	11,229
(*e*) Grass and other minor produce	...	1	...	...	...	6,891	1,354	...	2,104	57	481	10,888
II.—Timber and other produce removed from the forests by consumers or purchasers—												
(*a*) Timber	...	611	837	47,709	28,100	11,342	15,364	43,013	5,762	2,772	1,278	1,56,788
(*b*) Firewood and charcoal	...	9,242	3,927	7,639	9,978	2,958	32,070	10,132	6,040	1,838	1,259	85,083
(*c*) Bamboos	...	3,038	3,023	35,065	2,473	113	8,214	18,145	301	24	2,528	72,924
(*d*) Grazing and fodder grass	...	4	102	5,527	41,170	13,075	7,629	9,021	1,074	1,657	2,011	81,270
(*e*) Other minor produce	...	1,273	1,620	14,661	19,919	21,121	50,587	12,375	23,398	21,501	1,459	1,67,914
III.—Confiscated drift and waif wood	...	70	4	3,106	174	80	662	1,557	41	33	39	5,766
IV.—Revenue from forests not managed by Government...	...	55	...	...	...	...	...	...	...	...	...	55
V.—Miscellaneous—												
(*a*) Fines and forfeitures.	...	20	...	1,436	50	...	12	...	1	...	...	1,519
(*b*) Refunds	91	157	48	169	125	526	35	391	2	118	367	2,029
(*c*) Other sources	96	772	564	169	750	365	1,397	5,157	179	313	741	10,503
Total, Receipts ...	187	30,423	10,125	1,22,493	1,03,370	81,772	1,35,701	1,44,127	40,324	29,413	47,612	7,45,547

MADRAS,
3rd July 1891.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras, Northern Circle.

SUMMARY of Expenditure of the different districts, 1890-91.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godávari	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nílgiris.	Total.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
A.—*Conservancy and Works.*												
I.—Timber and other produce removed from the forests by Government Agency—												
(*a*) Timber ...	...	4,968	117	2,635	5	...	12,679	...	...	18	2,235	22,657
(*b*) Firewood and charcoal ...	...	5,506	...	465	242	15,566	639	20,882	381	105	9,224	53,010
(*c*) Bamboos ...	...	39	...	...	...	...	246	21	150	194	...	650
(*d*) Sandalwood ...	...	...	...	...	...	...	...	...	...	...	1,574	1,574
(*e*) Grass and other minor produce.	...	...	..	...	4	4,517	378	224	513	30	167	5,833
II.—Timber and other produce removed from the forests by consumers or purchasers ...	54	1,182	2,025	6,426	3,284	498	6,865	9,454	374	1,279	1,450	32,891
III.—Confiscated drift and waif wood ...	...	1,160	10	1,282	4	1	84	36	...	5	...	2,582
IV.—Revenue from forests not managed by Government ...	...	...	...	...	...	...	...	...	...	...	...	...
V.—Rent of leased forests, and payments to shareholders in forests managed by Government ...	...	...	...	...	...	...	...	...	10,000	...	3,500	13,500
VI.—Live stock, stores, tools and plant—												
(*a*) Purchase of cattle ...	...	...	...	...	...	...	...	...	...	...	...	...
(*b*) Feed and keep of cattle ...	...	...	...	2,202	...	...	...	...	...	...	1,395	3,597
(*c*) Stores, tools and plant ...	508	48	...	551	536	647	144	429	202	148	1,997	5,210
VII.—Communications and buildings—												
(*a*) Roads and bridges ...	...	1,062	6	2,146	1,249	...	729	830	514	359	2,125	9,020
(*b*) Buildings ...	...	2,603	...	1,288	1,594	1,064	1,534	1,753	570	1,910	3,131	15,447
(*c*) Other works ...	...	...	...	...	297	...	30	...	...	...	221	548
VIII.—Demarcation, improvement and extension of forests—												
(*a*) Demarcation ...	...	5,066	99	2,483	1,383	299	2,106	381	154	3,309	3,609	18,889
(*b*) Compensation for land and rights ...	...	...	...	728	1,643	66	548	1,111	...	25	...	4,121
(*c*) Surveys and working plans ...	971	800	...	401	49	413	718	704	327	310	89	4,782
(*d*) Plantations ...	112	917	...	838	3,005	4,034	2,282	267	238	1,154	4,949	17,796
(*e*) Protection from fire ...	...	1,316	402	650	1,071	848	6,168	1,834	2,192	2,028	2,730	19,239
(*f*) Other works ...	...	192	...	2,154	1,671	496	898	5	1,120	134	698	7,368
IX.—Miscellaneous—												
(*a*) Refunds ...	...	261	19	164	750	337	551	...	52	92	...	2,226
(*b*) Law charges ...	14	...	...	1	12	34	4	...	1	...	294	360
(*c*) Other charges.	77	173	...	52	616	29	45	160	90	2	552	1,796
Total A.—Conservancy and works	1,736	25,293	2,678	24,466	17,415	28,849	36,648	38,091	16,878	11,102	39,940	2,43,096

MADRAS,
3rd July 1891.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras, Northern Circle.

SUMMARY of Expenditure of the different districts, 1890-91.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godávari	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nílgiris.	Total.
B.—"Establishments."	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward, Total A. "Conservancy and Works."	1,736	25,293	2,678	24,466	17,415	28,849	36,648	38,091	16,878	11,102	39,940	2,43,096
I.—Salaries—												
(*a*) Conservators ...	14,801	...	...	...	...	...	...	...	...	...	...	14,801
(*b*) Superior officers ...	19,466	7,400	3,050	7,005	3,000	6,850	8,295	3,540	6,850	2,976	7,100	75,532
(*c*) Subordinate forest and depôt establishments.	1,500	4,984	2,207	8,500	6,896	6,732	11,189	8,496	5,991	5,174	8,523	70,192
(*d*) Office establishments.	14,603	1,691	829	1,836	1,766	2,339	2,744	2,288	1,269	1,353	1,977	32,695
(*e*) Deputation and special allowances ...	696	...	...	...	...	...	...	...	...	...	...	696
II.—Travelling allowances—												
(*a*) Conservators ...	3,368	...	...	...	...	...	...	...	...	...	...	3,368
(*b*) Superior officers ...	3,051	1,168	1,421	1,156	766	714	2,098	593	1,043	626	2,075	14,711
(*c*) Subordinate forest and depôt establishments	608	2,318	488	2,764	1,985	1,469	3,038	2,817	1,710	1,340	2,691	21,228
(*d*) Office establishments	2,112	333	194	271	529	240	656	367	189	376	141	5,408
III.—Contingencies—												
(*a*) Stationery ...	9	9	7	11	...	...	...	...	...	...	...	36
(*b*) Carriage of tents and records ...	627	126	62	96	199	109	79	31	77	159	40	1,605
(*c*) Rents, rates and taxes	125	283	12	180	1	...	28	3	101	9	...	742
(*d*) Pay of police guards	...	...	...	...	...	...	...	...	...	...	...	...
(*e*) Official postage ...	682	371	80	388	626	174	454	288	294	255	226	3,838
(*f*) Sundries	1,384	199	48	348	110	182	199	77	101	142	817	3,607
Total B. "Establishments" ...	63,032	18,882	8,398	22,555	15,878	18,809	28,780	18,500	17,625	12,410	23,590	2,48,459
Grand Total of expenditure ...	64,768	44,175	11,076	47,021	33,293	47,658	65,428	56,591	34,503	23,512	63,530	4,91,555

MADRAS,
3rd July 1891.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

ANNUAL FORM No. 65.

Forest Department, Madras, Northern Circle.

OUTSTANDINGS and Liabilities on account of Contractors and Disbursers for 1890-91.

District.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Conservator of Forests, Northern Circle ...	...	1,600 10 8	1,600 10 8	33 12 4	1,601 12 3	1,635 8 7	34 13 11	...
Two-fifths of Examiner's office	...	1,743 1 10	1,743 1 10	309 0 9	1,493 9 8	1,802 10 5	59 8 7	...
Forest Settlement office, Nellore and Bellary ...	...	287 4 0	287 4 0	14 8 0	290 0 0	304 8 0	17 4 0	...
Do. Kistna, &c.	..	.....	.....	.....	.....	.....	.....	...
Forest School, Dehra Dun.	...	.....	.....	.....	50 0 0	50 0 0	50 0 0	...
Ganjam	...	27,792 11 7	27,792 11 7	3,858 10 8	26,776 2 6	30,634 13 2	2,842 1 7	...
Vizagapatam	...	5,696 10 11	5,696 10 11	363 10 3	5,624 13 10	5,988 8 1	291 13 2	...
Godávari	...	35,913 15 5	35,913 15 5	1,945 15 5	37,250 10 7	39,196 10 0	3,282 10 7	...
Kistna	...	26,380 15 1	26,380 15 1	681 12 2	25,767 13 11	26,449 10 1	68 11 0	...
Nellore	...	37,993 4 2	37,993 4 2	913 8 3	38,885 0 10	39,798 9 1	1,805 4 11	...
Cuddapah	...	45,951 13 5	45,951 13 5	280 7 1	47,016 14 3	47,297 5 4	1,345 7 11	...
Kurnool	...	31,681 13 3	31,681 13 3	553 4 8	31,479 3 9	32,032 8 5	350 11 2	...
Bellary	...	16,950 2 8	16,950 2 8	269 7 0	16,790 5 10	17,059 12 10	109 10 2	...
Anantapur	...	17,614 15 9	17,614 15 9	710 8 9	17,111 2 7	17,821 11 4	206 11 7	...
Nílgiris	...	24,151 13 7	24,151 13 7	1,448 15 7	22,840 10 10	24,289 10 5	137 12 10	...
Total ...	...	2,73,759 4 4	2,73,759 4 4	11,383 8 11	2,72,978 4 10	2,84,361 13 9	10,602 9 5	...

MADRAS,
3rd July 1891.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

ANNUAL FORM No. 66.

Forest Department, Madras, Northern Circle.

REVENUE received and Outstandings on account of Revenue during 1890-91.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Direction ...	Timber and other produce ...	.....	186 8 1	186 8 1	186 8 1	.....
Ganjam ...	Do. ...	9,982 12 6	21,225 0 1	31,207 12 7	30,423 3 1	784 9 6
Vizagapatam ...	Do. ...	.....	10,124 14 7	10,124 14 7	10,124 14 7	.....
Godávari ...	Do. ...	6 1 0	1,23,003 10 4	1,23,009 11 4	1,22,492 11 4	517 0 0
Kistna	Do. ...	1,088 8 6	1,04,997 14 7	1,06,086 7 1	1,03,370 1 10 * +187 0 0	2,529 5 3
Nellore	Do. ...	.....	81,772 5 7	81,772 5 7	81,772 5 7	.....
Cuddapah ...	Do. ...	592 0 9	1,35,728 14 9	1,36,320 15 6	1,35,701 4 6 † +20 0 0	599 11 0
Kurnool	Do. ...	.....	1,44,127 7 0	1,44,127 7 0	1,44,127 7 0	.....
Bellary	Do. ...	1,168 6 0	40,556 13 11	41,725 3 11	40,323 9 0 ‡ +137 13 9	1,263 13 2
Anantapur ...	Do. ...	0 4 5	29,413 3 9	29,413 8 2	29,413 8 2	.....
Nílgiris	Do. ...	173 3 2	47,541 14 8	47,715 1 10	47,611 12 7	103 5 3
	Total ...	13,011 4 4	7,38,678 11 4	7,51,689 15 8	7,45,892 3 6	5,797 12 2

* Written off the accounts as per Board's Proceedings, No. 463 of 5th August 1890.
† Do. Board's Proceedings, No. 1232 Mis., of 28th November 1890.
‡ Do. Board's Proceedings, No. 219 Mis., of 13th March 1891.

MADRAS,
3rd July 1891.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

Annual Form No. 67.

Forest Department, Madras, Northern Circle.

Financial Results of the year 1890-91.

District.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Ganjam	15,181	23,174	15,265	7,967	20,806	30,446	51,947
Vizagapatam	...	117	10,132	7,529	6,020	10,132	13,666
Godávari	7,012	6,538	1,15,504	23,557	24,698	1,22,516	54,793
Kistna	631	251	1,02,762	16,951	23,863	1,03,393	41,065
Nellore	32,192	31,039	49,603	5,814	18,577	81,795	55,430
Cuddapah	19,731	22,065	1,15,993	22,382	28,753	1,35,724	73,200
Kurnool	44,336	21,127	99,814	23,630	19,606	1,44,150	64,363
Bellary	3,526	3,324	36,812	16,314	20,047	40,338	39,685
Anantapur	1,157	347	28,270	11,263	17,084	29,427	28,694
Nilgiris	37,930	27,787	9,696	14,755	26,170	47,626	68,712
Total ...	1,61,696	1,35,769	5,83,851	1,50,162	2,05,624	7,45,547	4,91,555

Forest Department, Madras, Northern Circle.

Abstract of Form No. 68 showing the number of trees felled by selection by Government Agency during the year 1890-91.

District.	Teak.	Sál.	Black or rose-wood.	Iron-wood.	Eucalyptus and Acacia.	Miscel-laneous.	Total.
Balance on hand on the 31st March 1890 ...	72	132	11	136	...	284	635
							* 6,911
Ganjam	...	2,633	...	...	...	266	2,899
Vizagapatam	...	...	...	2	...	7	9
Godávari	10,883	...	...	21	...	1,420	12,324
Kistna	...	...	...	...	...	1,464	1,464
Bellary	...	...	...	...	...	5	5
Anantapur	...	...	...	...	...	265	265
Nilgiris	240	...	20	...	5,835	270	6,365
Total ...	11,123	2,633	20	23	5,835	3,697	23,331
Conversion	11,195	2,735	26	43	5,835	3,916	23,750
Otherwise disposed of	...	...	2	...	...	13	15
Total ...	11,195	2,735	28	43	5,835	3,929	23,765
Balance on hand on the 31st March 1891	...	30	3	116	...	52	201

* Bamboos omitted this year as the form is intended for *trees* felled.

Forest Department, Madras, Northern Circle.

ABSTRACT of Form No. 69 showing by districts the collection of timber, &c., in the Northern Circle during the year 1890-91.

—	Timber. Teak.	Sál.	Red sanders.	Iron-wood.	Black-wood or rose-wood.	Miscellaneous.	Total.	Firewood and charcoal.	Bamboos.	Sandal-wood.	Minor produce.	Remarks.
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	MDS.	MDS.	
Stock of the circle at the beginning of the year 1890-91 ...	11,606	{ *40,290 + 807 }	7,202	2,282	1,477	{ 18,040½ — 807 }	80,897½	870,554	13,453	† 96	854¾	* Erroneously included under miscellaneous in the previous year's return.
Ganjam	...	20,006	...	...	...	995	21,001	96,654	6,723	...	23,469	
Godavari	52,877	...	...	572	...	7,549	60,998	44,947	...	...	...	
Kistna	...	...	...	...	...	94	94	4,080	19,935	...	18	
Nellore	...	...	...	...	...	169	169	153,746	...	...	12,222	† Or 43 cubic feet.
Cuddapah	26	...	67,222	...	...	7,602	74,850	28,516	11,288	...	1,340	
Kurnool	...	...	...	...	...	...	...	573,563	...	...	303	
Bellary	...	...	...	...	...	...	...	9,798	33,283	...	3,747	
Anantapur	8	...	...	...	...	1,611	1,619	32,404	47,064	...	1,052½	
Nilgiris	8,296	...	...	...	872	10,347½	19,515½	242,539	...	‡ 1,431	163¾	‡ Cubic feet.
Total actual new collection ...	61,207	20,006	67,222	572	872	28,367½	178,246½	1,186,247	118,293	1,431	42,315¼	
Collection by conversion ...	...	3,808	...	...	...	...	3,808	...	...	...	...	
Forest depot transfers ...	...	1,528	...	...	...	80	1,608	1,380	...	213	...	
Total ...	61,207	25,342	67,222	572	872	28,447½	183,662½	1,187,627	118,293	1,644	42,315¼	
Grand Total ...	72,813	66,439	74,424	2,854	2,349	45,681	264,560	2,058,181	131,746	1,687	43,170	
Sold in the forests	31,837	5,110	...	492	1,100	9,701½	48,240½	843,093	70,101	1,214	10,259	
Disposal by conversion ...	...	10,513	...	...	...	64	10,577	...	...	...	...	
Removed to sale depots ...	26	12,661	72,858	...	...	9,032½	94,577½	352,352	18,265	...	27,625¼	
Forest depot transfers ...	...	1,528	...	...	...	80	1,608	1,380	...	213	...	
Otherwise disposed of	1,913	1,628	1,566	...	...	3,604	8,711	80,378	20,869	43	383	
Total ...	33,776	31,440	74,424	492	1,100	22,482	163,714	1,277,203	109,235	1,470	38,267½	
Stock at the close of the year...	39,037	§ 34,999	...	2,362	1,249	23,199	100,846	§ 780,978	22,511	217	4,902¾	

§ The stock at close of year includes a quantity of sál timber and firewood which more recent verification proves to be missing and is the subject of enquiry.

Forest Department, Madras, Northern Circle.

ABSTRACT of Form No. 70 showing by Districts the Receipts and Issues of Timber and other Produce in Sale Depôts during the year 1890-91.

—	Timber. Teak.	Sál.	Red sanders.	Iron-wood.	Black or rose-wood.	Miscellaneous.	Total.	Firewood and charcoal.	Bamboos.	Minor produce.
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	MDS.
Stock on 1st April 1890	...	4,200	90,378	304	46	3,269	98,197	55,065	38	4,009½
Received from forests—										
Ganjam	...	12,661	...	...	...	567	13,228	122,005	4,075	22,168
Vizagapatam	...	...	...	...	...	...	...	795	...	...
Godávari	...	...	...	...	...	2,731	2,731	...	...	...
Kistna	...	...	...	...	...	...	...	...	...	...
Nellore	...	...	...	...	...	...	...	68,912	...	4,535½
Cuddapah	26	...	72,858	...	...	5,522	78,406	...	1,634	749¼
Kurnool	...	...	...	...	...	...	...	...	...	...
Bellary	...	...	...	...	...	...	...	966	358	150
Anantapur	...	...	...	...	...	...	...	...	12,198	22½
Nilgiris	...	...	...	...	...	212½	212½	159,374	...	...
Total ...	26	12,661	72,858	...	...	9,032½	94,577½	352,352	18,265	27,625¼
Received from other sale depôts ...	...	...	6	...	...	316	322	49,160	3,786	1,730
Received by conversion	...	3	...	...	...	...	3	...	...	...
Quantity found in the depôt ...	...	3,339	...	...	...	280	3,619	25,699	18,802	720¼
Total ...	26	16,003	72,864	...	...	9,628½	98,521½	427,211	40,853	30,075½
Grand Total ...	26	20,203	163,242	304	46	12,897½	196,718½	482,276	40,891	34,085
Sold from depôt	26	4,663	65,839	...	...	7,955½	78,483½	374,997	16,444	6,847¼
Removed to other sale depôts ...	...	...	6	...	...	316	322	49,160	3,786	1,730
Disposed by conversion	...	714	...	...	...	...	714	...	...	...
Otherwise disposed of	...	3,281	1,409	...	...	1,274	5,964	5,403	7,311	23,879¾
Total disposals ...	26	8,658	67,244	...	...	9,545½	85,483½	429,560	27,541	32,457
Balance in depôts on 31st March 1891.	...	11,545	95,988	304	46	3,352	111,235	52,716	13,350	1,628

ANNUAL FORM No. 71.

Forest Department, Madras, Northern Circle.

Sales of Timber and other Produce cut and collected by Government Agency during the year 1890-91.

District.	TIMBER.												TOTAL TIMBER.			
	Teak.		Sál.		Red sanders.		Ironwood.		Black or rosewood.		Miscellaneous.		From depot.		From forest.	
	From depot.	From forest.	From depot.	From forest.	From depot.	From forest.	From depot.	From forest.	From depot.	From forest.	From depot.	From forest.	Quantity.	Amount.	Quantity.	Amount.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	C.FT.	C. FT.	C. FT.	C.FT.	C. FT.	C.FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C.FT.	RS.	C. FT.	RS.
Ganjam	...	...	4,663	5,110	...	...	...	...	...	...	496	...	5,159	2,794	5,110	220
Vizagapatam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Godávari	...	20,870	...	...	...	...	...	492	...	...	2,176	113	2,176	1,304	21,475	4,567
Kistna	...	...	...	...	...	...	...	...	...	...	...	20	...	...	20	33
Nellore	...	...	...	...	...	..	...	...	...	...	2	...	2	...	...	...
Cuddapah	26	...	...	...	65,839	...	...	...	...	...	4,944	1,798	70,809	17,961	1,798	328
Kurnool	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bellary	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anantapur	...	8	...	...	...	...	...	...	...	...	...	942	...	...	950	132
Nilgiris	...	10,959	...	...	...	...	...	...	...	1,100	337½	6,828½	337½	26	18,887½	5,666
Total ...	26	31,837	4,663	5,110	65,839	...	...	492	...	1,100	7,955½	9,701½	78,483½	22,085	48,240½	10,946

District.	FUEL.				BAMBOOS.				SANDALWOOD.				MINOR PRODUCE.			
	From depot.		From forest.		From depot.		From forest.		From depot.		From forest.		From depot.		From forest.	
	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
	C. FT.	RS.	C. FT.	RS.	NO.	RS.	NO.	RS.	C. FT.	RS.	C. FT.	RS.	MDS.	RS.	MDS.	RS.
Ganjam	118,134	2,932	...	...	2,254	36	...	...	...	...	...	...	1	1	...	...
Vizagapatam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Godávari	...	...	23,023	1,653	...	...	...	...	...	...	...	...	...	...	...	...
Kistna	...	...	5,450	576	...	...	...	...	...	...	...	...	...	...	...	...
Nellore	78,246	19,618	53,379	5,688	...	...	...	...	...	...	...	...	4,699½	4,780	4,738½	2,111
Cuddapah	...	...	7,876	202	1,634	67	2,533	28	...	...	...	...	1,973¼	1,031	500¼	217
Kurnool	...	...	573,563	44,336	...	...	...	...	...	...	...	...	...	...	...	...
Bellary	2,484	302	2,277	188	358	10	32,925	922	...	...	...	...	150	28	3,406	1,053
Anantapur	...	...	31,134	228	12,198	275	34,643	465	...	...	...	...	23½	50	1,030	7
Nilgiris	176,133	14,454	146,391	6,006	...	...	...	...	...	...	1,214	11,229	...	...	583¾	478
Total ...	374,997	37,306	843,093	58,872	16,444	388	70,101	1,415	...	...	1,214	11,229	6,847¼	5,890	10,259	3,866

	Quantity sold.	Sold from depot. RS.	Sold from forest. RS.
I (*a*) ... ... C. Ft.	126,724	22,085	10,946
I (*b*) ... ... C. Ft.	1,218,090	37,306	58,872
I (*c*) ... ... No.	86,545	388	1,415
I (*d*) ... ... C. Ft.	1,214	...	11,229
I (*e*) ... ... Mds.	17,106½	5,890	3,866
	Total ...	65,669	86,328

Grand total of sales during the year, both from depots and forests ...		151,997
Add amount of outstandings of previous year		11,630
	Total ...	1,63,627
Deduct amount realized during the year as per Form No. 64 ...	...	1,61,696
Balance outstanding on 31st March 1891, as per Form No. 66		1,931

Annual Form No. 72-A.

Forest Department, Madras, Northern Circle.

Timber and other Produce cut, collected and removed by consumers or purchasers, during 1890-91.

District.	Timber.	Fire-wood and charcoal.	Bamboos.	Money Value of sales.											
				Timber.		Firewood.		Bamboos.		Grazing and fodder grass.		Minor Produce.		Total.	
				Amount of sales.	Amount actually realized.	Amount of sales.	Amount actually realized.	Amount of sales.	Amount actually realized.	Amount of sales.	Amount actually realized.	Amount of sales.	Amount actually realized.	Amount of sales.	Amount actually realized.
	C. FT.	C. FT.	NO.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	Rs.	RS.	RS.
Ganjam	21,490	789,135	154,661	611	611	9,242	9,242	3,038	3,038	4	4	1,273	1,273	14,168	14,168
Vizagapatam ...	26,035	174,950	278,250	837	837	3,927	3,927	3,023	3,023	102	102	1,620	1,620	9,509	9,509
Godávari	422,670	340,831	7,016,543	47,709	47,709	7,639	7,639	35,065	35,065	5,527	5,527	14,621	14,661	1,10,601	1,10,601
Kistna	418,327	702,396	584,310	28,100	28,100	10,087	9,978	2,473	2,473	42,537	41,170	20,092	19,919	1,03,289	1,01,640
Nellore	73,348	75,003	1,840	11,342	11,342	2,958	2,958	113	113	13,075	13,075	21,121	21,121	48,609	48,609
Cuddapah	485,237	1,380,113	937,050	15,364	15,364	32,070	32,070	8,214	8,214	7,629	7,629	50,617	50,587	1,13,894	1,13,864
Kurnool	433,780	384,780	2,702,000	43,013	43,013	10,132	10,132	18,145	18,145	9,021	9,021	12,375	12,375	92,686	92,686
Bellary	12,722	206,979	15,620	5,762	5,762	6,048	6,040	301	301	1,212	1,074	24,509	23,398	37,832	36,575
Anantapur	25,656	104,982	2,325	2,772	2,772	1,838	1,838	24	24	1,657	1,657	21,501	21,501	27,792	27,792
Nilgiris	7,103	24,997	242,685	1,278	1,278	1,259	1,259	2,528	2,528	2,011	2,011	1,459	1,459	8,535	8,535
Total ...	1,926,368	4,184,166	11,935,284	1,56,788	1,56,788	85,200	85,083	72,924	72,924	82,775	81,270	1,69,228	1,67,914	5,66,915	5,63,979
Add outstandings due from previous year as per Form No. 66														1,265	
Total ...														5,68,180	
Deduct amount realized during the year as per Form No. 64														5,63,979	
Do. amount written off														345	
Balance outstanding on 31st March 1891 as per Form No. 66														3,856	

Annual Form No. 72-B.

Forest Department, Madras, Northern Circle.

Timber and other Produce confiscated and sold during the year 1890-91.

District.	Timber.	Fuel.	Bamboos.	Minor produce.	Total amount of sales.	Amount actually realized.
	C. FT.	C. FT.	NO.	RS.	RS.	RS.
Ganjam	192	654	366	...	70	70
Vizagapatam	...	118	...	1	4	4
Godávari	7,522	14,006	2,535	76	3,106	3,106
Kistna	2,102	28	717	5	174	174
Nellore	360	600	...	...	80	80
Cuddapah	1,555	1,180	17	49	* 662	* 662
Kurnool	2,159	312	2,520	9	1,557	1,557
Bellary	78	131	...	17	41	41
Anantapur	128	33	...	21	33	33
Nilgiris	120	52	9	...	39	39
Total ...	14,216	17,114	6,164	178	5,766	5,766

* Of which Rs. 116 is on account of outstanding of previous year.

ANNUAL FORM NO. 73-A.

Forest Department, Madras, Northern Circle.

ABSTRACT showing the Value of Timber and other Produce at sale depôts, for the year 1890-91.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.		Remarks.
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.	
				Rs.			Rs.	Rs.	Rs.	
Ganjam ...	Sál logs	225	2,061	674	1,076	10,930	4,098	3,424	...	
	Do. sleepers	468	2,086	365	270	600	540	175	...	
	Do. rafters	71	39	5	4	2	1	...	4	
	Do. planks	27	14	1	25	13	1	...	...	
	Do. slabs	13,184	...	232	8,397	...	132	..	100	
	Ebony	3	46	21	3	46	21	...	...	
	Miscellaneous	214	2,992	647	948	2,367	400	...	247	
	Total timber ...	...	7,238	1,945	...	13,958	5,193	3,248	...	
	Firewood and charcoal ...	...	13,047	25	...	41,654	1,050	1,025	...	
	Bamboos	38	...	1	13,350	...	170	169	...	
	Minor produce ... Mds.	...	...	...	1,232	...	20	20	...	
Vizagapatam.	Fuel	...	...	...	...	795	12	...	12	
Godávari...	Ironwood sleepers ...	228	304	456	228	304	456	...	...	
	Miscellaneous	...	...	...	68	319	80	80	...	
	Total timber ...	228	304	456	296	623	536	80	...	
Nellore ...	Casuarina pole	1	2	1	...	...	...	...	1	
	Firewood	...	9,847	2,456	..	48	30	...	2,426	
	Minor produce ... Mds.	66	Mds. 198	380	...	...	...	...	380	
Cuddapah.	Red sanders	Tons 1,883	90,378	23,196	1,999	95,988	19,991	...	3,205	
	Miscellaneous	...	...	...	320	516	134	134	...	
	Total timber ...	1,883	90,378	23,196	2,319	96,504	20,125	...	...	
	Minor produce ... Mds.	3,810½	...	1,356	396	...	117	...	1,239	
Bellary ...	Fuel	26	1,794	190	..	...	...	...	190	
Anantapur ...	Minor produce ... Mds.	1	...	3	..	...	...	...	3	
Nílgiris ...	Drag poles, &c.	275	275	37	150	150	187	150	...	
	Total timber ...	275	275	37	150	150	187	150	...	
	Firewood and charcoal ...	576¾	30,377	2,429	248	10,219	815	...	1,614	
	Grand Total ...	...	...	32,475	...	...	28,255	...	4,220	

ABSTRACT.

Timber	..	98,197	25,635	...	111,235	26,041	406	...
Fuel	...	55,065	5,100	...	52,716	1,907	...	3,193
Bamboos	38	...	1	13,350	...	170	169	...
Minor produce ... Mds.	4,009½	Mds.	1,739	1,628	Mds.	137	...	1,602
Total ...	...	...	32,475	...	...	28,255	...	4,220

Annual Form No. 73-B.

Forest Department, Madras, Northern Circle.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1890-91.

District.	Description of stock.	On hand at commencement of the year.		On hand at end of the year.		Difference in value.		Remarks.
		Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
			Rs.		Rs.	Rs.	Rs.	
Direction ...	Surveying and other instruments.	19	193	24	402	...	...	
	Furniture	80	1,004	107	1,670	...	...	
	Letter-weighing scales with weights.	2	108	2	120	...	...	
	Miscellaneous	8	57	27	121	...	...	
	Total ...	109	1,362	160	2,313	951	...	
Ganjam ...	Rest or inspection houses	7	5,433	* 13	7,915	...	...	* Russelkonda, Berhampore, Gullery, Hatiguda, Ramba, Tilsingi, Chondorgiri, Jaganathprasad, Gundribadi, Khariguda, Bonta, Tarsingi and Kurcholi.
	Range houses	3	1,590	† 3	1,590	...	...	† Gayagonda, Mojjagodo, and Surada.
	Guards' and tannah huts.	16	953	16	953	...	...	
	Surveying and other instruments.	26	434	23	392	...	...	
	Furniture	46	365	46	350	...	...	
	Tools	200	319	178	276	...	...	
	Cash chests	...	...	10	80	...	...	
	Letter-weighing scales.	1	34	1	34	...	...	
	Miscellaneous	3	43	6	130	...	...	
	Total ...	302	9,171	296	11,720	2,549	...	
Vizagapatam.	Surveying and other instruments.	10	23	10	23	...	...	
	Tools	16	...	16	...	...	...	
	Furniture	22	97	22	97	...	...	
	Miscellaneous	1	12	1	12	...	...	
	Total ...	49	132	49	132	...	...	
Godávari ...	Rest or inspection house.	3	2,100	‡ 5	2,800	...	...	‡ Rekapalli, Murmúr, Jiriguppa, Singaram, and Chintoor.
	Range house	1	350	§ 1	350	...	...	§ Marrigudem.
	Depôt and office sheds ...	8	236	8	236	...	...	
	Guards' and tannah huts.	10	97	10	97	...	...	
	Surveying and other instruments.	32	385	48	494	...	...	
	Tools	458	441	577	506	...	...	
	Furniture	61	496	56	346	...	...	
	Boat	1	1,500	1	1,500	...	...	
	Scales with tripods with 3 sets of weights.	3	413	3	459	...	...	
	Letter-weighing scales ...	...	...	1	16	...	...	
	Cash chests	...	...	17	246	...	...	
	Elephants	4	6,000	4	6,000	...	...	
	Miscellaneous	120	651	139	1,146	...	...	
	Total ...	701	12,669	870	14,196	1,527	...	

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1890-91—*cont.*

District.	Description of stock.	On hand at commencement of the year.		On hand at end of the year.		Difference in value.		Remarks.
		Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
			Rs.		Rs.	Rs.	Rs.	
Kistna ...	Rest or inspection house.	3	3,010	*4	4,700	...	...	*Kondapalli, Kondavid, Remedicherla and Bellamkonda.
	Range house	...	...	†1	350	...	...	†Vinukonda.
	Guards' and tannah huts.	10	266	37	1,110	...	...	In the return for 1889-90, 10 was a mistake for 30, and 7 Guards' huts were constructed during the year 1890-91.
	Surveying and other instruments.	39	656	50	597	...	...	
	Tools	298	147	315	361	...	...	
	Furniture	41	354	45	357	...	...	
	Boats (staff)	1	2,420	1	2,000	...	...	
	Dingies	5		6	465	...	...	
	Letter-weighing scales...	1	2	2	42	...	...	
	Cash boxes	...	...	17	165	...	...	
	Miscellaneous	1	23	4	83	...	...	
	Total ...	399	6,878	482	10,230	3,352	...	
Nellore ...	Rest or inspection house.	1	1,150	1	1,150	...	...	Udayagiri.
	Office building	...	...	1	200	...	...	Sriharikota.
	Guards' and tannah huts.	4	...	6	...	...	...	
	Surveying and other instruments.	45	271	56	375	...	...	
	Tools	382	331	364	303	...	...	
	Furniture	91	407	56	388	...	...	
	Scales and weights, 55 sets.	7	744	7	743	...	...	
	Cash safes	4	210	4	210	...	...	
	Boxes	18	28	17	26	...	...	
	Boats	11	4,478	‡ 12	4,646	...	...	‡ 1 boat was sold in auction for Rs. 87, and 2 newly built for Rs. 255.
	Tramway	8½	31,338	8½	32,644	...	...	
	Miscellaneous	2	35	37	192	...	...	
	Total ...	573½	38,992	569½	40,877	1,885	....	
Cuddapah ...	Rest or inspection houses	6	11,240	§ 6	10,710	...	...	§ Kodur, Sanipaya, Balapalle, Mogilipenta, Horsleykonda, and Vontimetta.
	Range houses	5	2,920	5	3,100	...	...	‖ Rayachoti, Sidhout, Rajampet, Badvél, and Kodúr.
	Depôt and office sheds ..	4	670	4	668	...	...	
	Guards' and tannah huts.	81	1,463	84	1,338	...	...	
	Surveying and other instruments.	41	381	49	510	...	...	
	Tools	360	579	329	421	...	...	
	Furniture	81	515	87	550	...	...	
	Scales and weights ...	7	565	7	565	...	...	
	Cash chests	...	...	11	92	...	...	
	Buffaloes	2	32	2	32	...	...	
	Miscellaneous	...	...	16	160	...	...	
	Total ...	587	18,365	600	18,146	...	219	
Kurnool ...	Bungalow, head-quarters	1	11,000	1	11,000	...	...	Nandyal.
	Rest or inspection houses	4	4,700	¶	4,387	...	...	¶ Rollapenta, Bainuti, Mantrala, and Buswapur.
	Range houses	2	550	** 2	400	...	...	** Dornal, and Kistnamchettipalle.
	Guards' and tannah huts.	31	2,084	31	1,925	...	...	
	Surveying and other instruments.	35	339	35	339	...	...	
	Tools	614	1,083	642	1,121	...	...	
	Furniture	39	206	49	398	...	...	

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1890-91—*cont.*

District.	Description of stock.	On hand at commencement of the year.		On hand at end of the year.		Difference in value.		Remarks.
		Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
			RS.		RS.	RS.	RS.	
Kurnool—*cont.*	Cash chest	1	8	10	68	...	...	
	Scales with weights ...	1	10	1	10	...	...	
	Miscellaneous	...	...	6	10	...	...	
	Total ...	728	19,980	781	19,658	...	322	
Bellary ...	Range house	1	561	* 1	1,105	...	...	* Sandúr.
	Rest or inspection house.	1	500	1	450	...	...	† Donemalai.
	Guards' and tannah huts.	3	35	3	25	...	...	
	Surveying and other instruments.	25	253	32	129	...	...	
	Tools	230½	236	238½	239	...	...	
	Furniture	37	319	29	272	...	...	
	Scales with weights ...	3	248	1	220	...	...	
	Letter-weighing scales.	1	15	3	15	...	...	Value of 2 not known.
	Cash chests	...	...	5	35	...	...	
	Miscellaneous	1	23	16	47	...	...	
	Total ...	302½	2,190	329½	2,537	347	...	
Anantapur ...	Head-quarters bungalow, with out-house.	1	6,991	1	6,991	...	...	
	Rest or inspection houses	2	5,800	‡ 4	7,800	...	...	‡ Gollah, Konapanainapalle, Pathakottacheruvu, and Penukonda.
	Range houses	...	...	§ 2	960	...	...	§ Dharmavaram and Bukkapatnam.
	Guards' and tannah huts.	15	79	‖ 3	100	...	...	‖ 13 huts costing Rs. 39 are not worth keeping in the list as they are temporary sheds. 1 hut on Rs. 60 newly built.
	Surveying and other instruments.	43	142	47	227	...	...	
	Tools	148	276	86	166	...	...	
	Furniture	61	375	57	342	...	...	
	Cash safe with padlock.	6	52	6	50	...	...	
	Scales with weights ...	4	200	4	180	...	...	
	Letter-weighing scales with 7 weights.	...	...	1	7	...	...	
	Miscellaneous	1	23	88	171	...	...	
	Total ...	281	13,938	299	16,994	3,056	...	
Nílgiris ...	Rest or inspection houses.	¶ 2	1,860	4	2,917	...	...	¶ Kullar, Rallia.
	Range houses	5	970	5	1,280	...	...	
	Guards' and tannah huts and seed houses.	43	2,415	50	2,640	...	...	
	Surveying and other instruments.	35	235	37	321	...	...	
	Tools	780	1,440	807	1,565	...	...	
	Furniture	59	590	71	623	...	...	
	Charcoal kiln	2	545	4	1,900	...	...	
	Elephants	2	1,600	2	1,200	...	...	
	Do. calves... ...	3	1,100	3	1,600	...	...	
	Miscellaneous:							
	Chains of elephants ...	8	160	10	90	...	...	
	Fetters	...	...	2	10	...	...	
	Total ...	939	10,915	995	14,146	3,231	...	
	Grand Total ...	4,971	1,34,592	5,431	1,50,949	16,357	...	

ANNUAL FORM NO. 74.

Forest Department, Madras.

Statement of Elephants in Northern Circle during the year 1889-90.

PART I.

Elephants in possession of the Reporting Officers throughout the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep including servants and food.				Remarks.
					RS.	A. P.	
Godávari.	Bada moti guz ...	Purchased in July 1888.	Average per month.		45	14 0	
	Pown guz ...	Do. do.	Do.	do. ...	45	14 0	
	Captain Gunning ...	Do. do.	Do.	do. ...	45	14 0	
	Jung Bahadúr ...	Do. do.	Do.	do. ...	45	14 0	Total expenditure Rs. 2,202 for 12 months.
Nílgiris ...	Lutchmi ...	Transferred from the Anamalais on the 30th January 1882.	April	1890 ...	54	0 0	
	Chinna Lutchmi ...		May	do. ...	55	0 0	
	Mabu Baksh ...	Born in January 1885...	June	do. ...	186	4 10	
	Akbar Baksh ...	Born on 22nd February 1888.	July	do. ...	56	6 0	
	Meenatchi ...	Born on 9th April 1889.	August	do. ...	105	0 0	
			September	do. ...	167	8 0	
			October	do. ...	55	0 0	
			November	do. ...	184	4 0	
			December	do. ...	99	8 0	
			January	1891 ...	73	0 0	
			February	do. ...	127	0 0	
			March	do. ...	232	0 0	Total expenditure Rs. 1,394-14-10 for 12 months.

PART II.

Elephants received in the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of keep including servants and food.	Remarks.
	Nil.			

PART III.

Elephants gone off the list during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of keep including servants and food.	How disposed of.
	Nil.			

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—again the following G.O., dated 12th December 1891, Nos. 1187A, 1287A, Revenue:—

Read—the following Proceedings of the Board of Revenue (Land Revenue), dated 14th October 1891, Forest No. 433:—

THE HON. MR. J. GROSE.

Read—the following letter from the Acting Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue, dated Madras, 15th August 1891, No. 1349:—

I have the honour to submit herewith the report in print (complete) by Colonel I. Campbell Walker, Conservator of Forests, on the Administration of the Forest Department in this Circle during 1890–91.

ENCLOSURE No. 1.—Report for 1890–91.

Read—the following letter from E. D. M. HOOPER, Esq., Acting Conservator of Forests, Northern Circle, to the Secretary to the Commissioners of Land Revenue, dated Madras, 4th August 1891, No. 1380:—

I have the honour to submit the Annual Administration Report of the Forests of the Northern Circle of the Madras Presidency for the year ending 31st March 1891. Having only assumed charge of the circle three months subsequent to the period under report, I would crave the indulgence of Government for any shortcomings in the report which has been prepared in a very short time and with considerable difficulty on account of the vagueness of the information and inaccuracy of the figures reported to this office.

ENCLOSURE No. 1.—Report for 1890–91.

Resolution—dated 14th October 1891, Forest No. 433.

The Board begs to submit to Government its review of the reports of the Conservators of Forests on the progress of forest administration in the Madras Presidency for 1890–91.

2. *Establishment.*—The subjoined table shows the strength of the staff in the two circles :—

	Northern Circle.	Southern Circle.
Conservators	1	1
Deputy Conservators	4	8
Assistant Conservators	8	7
Sub-Assistant Conservators	6	8
Rangers	24	33
Foresters	50	77
Forest Guards	359	396

There was no change of any importance in the establishment during the year. Since its close, however, proposals for the increase and reorganization of both the superior and the subordinate establishments have been submitted to Government and have received the approval of the Government of India and the sanction of the Secretary of State. This new scale of establishment will be brought into force gradually in the two circles as qualified men become available ; and when the full complement is entertained, the result cannot but be most marked in the more efficient protection and development of the forests and the expansion of the revenue of the department. Even with the present limited resources at its disposal, the department has realized during the year under review a gross revenue of nearly 18 lakhs ; out of this, only some 12½ lakhs have been spent, leaving a surplus of 5½ lakhs, the highest on record, but it would be a mistake to consider the leaving of so large a surplus as this a matter for unalloyed satisfaction : in these early days of forest exploitation, the forests need all the money that can be spent upon them, and a surplus of nearly one-third of the total receipts is obviously much greater than it should be. For this starving of the forests, the present weakness of the staff must be held responsible, and with the full staff now sanctioned, therefore, this should be remedied, and a plentiful investment of capital in buildings, roads, demarcation, survey, &c., should be made.

Colonel Walker was in charge of the Southern Circle for the whole year, and Mr. Peet, of the Northern Circle, with the exception of a few days in March 1891. The former inspected all the districts in his circle, and the latter all his districts except Ganjam and Vizagapatam.

3. *Area of Forests.*—The following statement shows the area of the several classes of forests at present under the control of the department :—

—	Area on 31st March 1890.	Added.	Excluded.	Area on 31st March 1891.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
A. Reserved forests	3,738	1,411.	37	5,112
B. do. lands	12,327½	648½	1,540½	11,435½
C. Other forests	1,476½	186	387	1,275½
Total	17,542	2,245½	1,964½	17,823

The increase under reserved forests is the result of the final notification of a number of blocks which were under settlement and were consequently shown as reserved lands in the return of the previous year. With it is a corresponding decrease under reserved lands. The area of new blocks brought under the control of the department as reserved lands during the year was 186 square miles in the Madura and Salem districts of the Southern Circle and 77½ square miles in several districts of the Northern Circle. The areas of several of the old blocks have been recomputed, and this has caused considerable differences between the figures of 1889–90 and those of 1890–91.

The annexed statement shows the existing area of reserved forests and reserved lands in each district and the percentage of the two to the total uncultivated area of the district ; these areas will have, however, to be considerably increased with reference

to Government Order, dated 29th October 1890, No. 844, in which Government has laid down the principle that the Forest Department should undertake the task of providing the timber, fuel and pasture supply of the Presidency, realizing that it is useless to leave it to the ryots to undertake their own supply. Under this order of course the area under control will have to be very largely increased, and the further selection of areas is being proceeded with on this basis. Collectors have estimated the probable increase in the several districts at 5,381 square miles; formal proposals showing in detail the possibilities of each taluk have not been submitted by them, but are expected shortly. Even for the districts for which schemes have already been submitted with reference to Government Order, dated 16th January 1888, No. 51, and approved by Government, revised schemes showing their requirements under the new Government Order have been called for :—

Northern Circle.	Reserved forests excluding forests reserved under previous rules.	Reserved lands.	Percentage of reserved areas to uncultivated area of the district.	Southern Circle.	Reserved forests excluding forests reserved under previous rules.	Reserved lands.	Percentage of reserved areas to uncultivated area of the district.
	SQ. MLS.	SQ. MLS.			SQ. MLS.	SQ. MLS.	
Ganjam	85	463	32·6	Chingleput	126	56	16·6
Vizagapatam	4	10	·9	North Arcot	430	523	38·2
Godávari	345	709½	45·1	South Arcot	148	662	31·2
Kistna	346	341	28·2	Salem	684	570	37·3
Nellore	168½	427	23·5	Trichinopoly	141	95	22·5
Cuddapah	356	1,663	36·3	Tanjore	9	16	3·1
Kurnool	242	1,642½	45·4	Coimbatore	685	1,848	73·3
Bellary	77	305½	16·4	Madura	379	114	30·8
Anantapur	14	263	10·6	Tinnevelly	428	162	47·3
Nilgiris	201½	183	60·7	Malabar	158	442	14·6
				South Canara	85	940	31·5
Total ..	1,839	6,007½	30·7	Total ..	3,273	5,428	34·7

It will be seen that the percentages are higher in the districts of the Southern Circle where forest conservancy is more advanced than in those of the Northern. These percentages range from 73·3 to 3·1 in the former and from 60·7 to ·9 in the latter circle. The figures for the districts of Tanjore, Trichinopoly, Chingleput, Malabar and Canara in the Southern Circle are low, but the circumstances of these districts are special. In Tanjore, which is not a real forest district, conservancy has not been seriously taken in hand hitherto chiefly owing to the want of a separate District Forest-officer. The present District Forest-officer of Trichinopoly and Tanjore has, however, recently investigated the district and has expressed his opinion that there is an ample area available for planting operations on the river margins—an opinion in which the Acting Collector also agrees. The Board has therefore recommended the separation of this district from the Trichinopoly division. This will no doubt be done as soon as an officer of the controlling staff becomes available. Mr. Carroll was engaged for a few months in the selection of areas for reservation, but owing to paucity of officers he had to be transferred to Salem before the work could be completed. In Trichinopoly proposals have been received for the reservation of a large extent in the Kulitalai, Musiri and Perambalúr taluks and these will be shortly submitted to Government and will add considerably to the area under control. In Malabar and Canara, the extension of forest operations has been rendered difficult by the peculiar tenure on which land is held in those districts and the absence of the usual Government waste land. In Chingleput the general sterility of the soil has stood in the way of forming large reserves. In most of the districts it is believed that the further selection of reserves with reference to the order of 29th October last has not yet been taken up with any energy chiefly owing to paucity of officers. But the question of relieving District Forest-officers of their routine work by the appointment of special officers in order to enable them to give more time to selection and settlement is engaging the attention of the Board.

In the Northern Circle the work of selection is still incomplete in most of the districts and this accounts for the smaller percentage of reserved areas as compared with the Southern Circle. The question of village forests, however, having been definitely set at rest, there ought to be no difficulty in ascertaining the exact forest requirements of each district and in constituting all reserved lands finally into reserved forests.

4. *Settlement.*—The following statement shows the progress of forest settlement in the form prescribed by the Government of India:—

Circle.	Unreserved forest area, 1st April 1890.	Added during year (net).	Total.	Area notified under section 4, 1st April 1890.	Added during year (net).	Notified under section 16 during year (net).	Balance notified under section 4 but unsettled.	Total unreserved area on 31st March 1891.
1	2	3	4	5	6	7	8	9
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Northern Circle	6,842½	— 799½	6,043	6,455	* 225	‡1,024	5,656	6,043
Southern ,, ...	6,962	— 294	6,668	2,958	† 775	§ 360	3,373	6,668

* This is made up of 147½ square miles due to the rectification of the area of the blocks added in previous years and 77½ square miles, the area notified for settlement during the year.

† The area notified for settlement during the year was 902 square miles, but 103 square miles in North Coimbatore and 24 square miles in Madura had to be deducted from it, these being the decrease caused by the recomputation of, and an error in, the areas of blocks notified for settlement in previous years.

‡ In this figure, 10 square miles in Vizagapatam deducted owing to rectification of area have not been taken into account.

§ The area actually notified under section 16 was 378 square miles; but to this 9 square miles had to be added and 27 square miles deducted, owing to rectification of areas.

	Northern Circle. SQ. MLS.	Southern Circle. SQ. MLS.
1883–84	...	725
1884–85	7½	388
1885–86	95	413
1886–87	372	312
1887–88	151	564
1888–89	6	398
1889–90	193½	113
1890–91	1,014	360
Total ...	1,839	3,273

It will be seen that the area finally notified during the year is far larger in the Northern Circle than in the Southern Circle, and that the area is larger in 1890–91 than in any of the previous years as shown in the margin. The blocks notified under section 4, but not notified under section 16, consist of 391 blocks of 5,656 square miles in the Northern Circle and of 292 blocks of 3,373 square miles in the Southern Circle.

The balance in the Northern Circle is particularly large in the Cuddapah, Kurnool and Godávari districts. In Godávari, there are 43 blocks (area, 709½ square miles)—3 (area, 182 square miles) to be settled by the Special Assistant Agent in charge of Bhadráchalam and Rékapalle taluks and 40 (area, 527½ square miles) by the Special Forest Settlement-officer M.R.Ry. D. Jagannada Row. Of these, the three former are awaiting the survey of the forest boundaries, which the Collector has been requested to expedite. Of the 40 blocks entrusted to M.R.Ry. Jagannada Row, reports for 7 blocks (area, 103·31 square miles) have been submitted by him, 15 (area, 262·19 square miles) are awaiting demarcation by the District Forest-officer, 1 (area, 2½ square miles) is awaiting the preparation of a sketch-map to accompany the final notification, in two blocks (area 7 square miles) steps are being taken to acquire the private lands and the rest (area, 152·5 square miles) have not yet been taken up by the Forest Settlement-officer.

In Kurnool 12 blocks (area, 1,642½ square miles) were pending at the end of the year; of these one (viz., North Dhone) (area, 15·62 square miles) is still pending with the Forest Settlement-officer, five (area, 962 square miles) have been notified since the close of the year, one (area, 3·1 square miles) has been submitted to Government and the remaining five (area, 661·8 square miles) are pending disposal by the Board.

In Cuddapah 89 blocks (area, 1,482 square miles) were pending notification; of these 59 (area, 1,068·5 square miles) had been reported on by the Forest Settlement-

officer, and of these 59, 40 (area, 985·4 square miles) had been returned by the Board for revision and were pending with the District Forest-officer for the preparation of correct sketch-maps and boundary descriptions; 22 more (area, 338·5 square miles) had been settled, but the report was delayed for want of the maps and boundary descriptions; the remaining 8 (area, 75 square miles) were pending either with the Forest Settlement-officer or the District Forest-officer in various stages of settlement. The blocks were notified under section 4 in 1884 and 1886, but their settlement has been delayed for various reasons, and the final notifications for many of them will probably come up with the notifications for the additional areas taken up under the Government Order of October 1890, many of which will be extensions of those previously selected. Of the total balance for the Northen Circle, 75 per cent. is said to have been actually settled, but the final reports for this area have not yet reached the Board.

It would have been convenient for reference if a statement similar to that furnished by the Conservator of Forests, Southern Circle, showing the years in which the blocks still pending were notified under section 4 had been furnished. The Conservator is requested to supply this in his future reports.

In the Southern Circle, the balances in North and South Arcot, Salem and North Coimbatore call for remark. In North Arcot the whole of the area has been settled, but is awaiting notification. In South Arcot, the greater portion has been settled, but has not been notified either for want of maps, &c., or because the private lands included have not yet been acquired by exchange of other lands, &c. Only those recently notified are still under settlement. So in Salem some of the oldest blocks are only awaiting the result of appeals filed by claimants against the orders of Forest Settlement-officers and those lately notified are still under settlement.

The following statement shows the state of forest settlement work at the close o the year under review:—

—	Total under settlement.		Total finally notified.		Total settled and awaiting notification.		Under settlement.	
Northern Circle.	NO.	SQ. MLS.	NO.	SQ. MLS.	NO.	SQ. MLS.	NO.	SQ. MLS.
Ganjam	41	532	8	85	16	249½	17	197½
Vizagapatam	6	14	1	4	..	..	5	10
Godávari	77	1,054½	34	345	11	303	32	406½
Kistna	65	687	44	346	9	263	12	78
Nellore	123	576½	88	168½	27	199	8	209
Cuddapah	109	1,838	20	356	81	1,407	8	75
Kurnool	15	1,884½	3	242	9	1,594½	3	48
Bellary	64	320	25	77	13	67	26	176
Anantapur	45	277	5	14	19	128	21	135
Nilgiris	127	311½	53	201½	55	30	19	80
Total ..	672	7,495	281	1,839	240	4,241	151	1,415
Southern Circle.								
Chingleput	91	161	59	126	15	25	17	10
North Arcot	94	873	50	430	44	443	..	..
South do.	113	659	44	148	48	314	21	197
Salem	126	1,116	78	684	25	262	23	170
Trichinopoly	74	197	39	141	29	29	6	27
Tanjore	24	19	17	9	7	10	..	..
North Coimbatore	13	1,278	6	119	4	657	3	502
South do.	10	566	10	566	..	..	..	..
Madura	81	476	73	379	8	97	..	..
Tinnevelly	39	589	29	428	10	161	..	..
North Malabar	13	261	7	119	6	142	..	..
South do.	21	299	6	39	10	19	5	241
South Canara	27	152	16	85	11	67	..	..
Total ..	726	6,646	434	3,273	217	2,226	75	1,147

It shows that out of a total area of 14,141 square miles notified under section 4, 5,112 square miles or 36 per cent. has been finally notified under section 16, that 6,467

square miles or 45 per cent. has been settled but not notified, and that the remainder, which is only 19 per cent., is under settlement. The figures noted in the margin show that there has been better progress made both in settlement and in actual notification in the year 1890–91 than in either of the two preceding years; but the Board is very sensible that such progress is even yet not so rapid as could be wished. The delays occur chiefly because of the want of maps and because of the wide area over which the Forest Settlement-officers have to travel. The former, the Board has remedied as far as possible by placing a number of surveyors at the disposal of Conservators to be used by them whenever most needed; the latter, it has it in its mind to remedy by greater concentration. Blocks to be settled come up from several districts together and have to be allotted to one or other of the four Settlement-officers sanctioned for the Presidency; this means that each Forest Settlement-officer has blocks in four or five districts at a time to attend to, and partly to set the settlement work in motion, partly to utilize elsewhere the delays which the Act prescribes at particular stages of the settlement of each block, the Forest Settlement-officer travels backwards and forwards working now in one district, now in another. This leads to confusion and delays of its own, and the Board proposes, therefore, to adopt a system of greater concentration, each Forest Settlement-officer being directed to finish one district before commencing another. If, at the same time, assistance is given to the District Forest-officer to enable him, with hands free of routine work, to push on with the selection of the additional areas required under the Government Order of October 1890, the Board trusts that it will be found possible to take and complete, once and for all, district after district in fairly rapid succession.

Year.	Notified.		Settled but not notified.	
	Northern Circle.	Southern Circle.	Northern Circle.	Southern Circle.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Up to 1888–89	631	2,800	3,830	1,695
,, 1889–90	825	2,913	4,022½	2,378
,, 1890-91	1,839	3,273	4,241	2,226

The Board has also issued detailed instructions in regard to the preliminary demarcation and mapping necessary for settlement; hitherto it has been usual to leave this to be done after settlement, *i.e.*, between the notification under section 4 and that under section 16 and the result is seen in the large number of blocks which now have to be entered year after year as "settled but not reported on:" these blocks, in other words, are waiting to be demarcated, and mapped, before the final notification can be guaranteed to be accurate; and this delay is the cause of considerable confusion, both to the public and to the local officials. The Board has now altered this, and has, on the suggestion of Government, ordered the demarcation and mapping to precede the settlement, a procedure which will both give the Settlement-officer and the public a better idea of the area that is being dealt with and will avoid the tedious delay, already referred to; arrangements have also been made by which the District Forest-officers will be able to obtain the assistance of the Revenue Survey-officer in preparing the settlement sketches required.

The information called for in the official memorandum from Government, dated 20th August 1891, No. 94, regarding the work turned out by each of the Special Forest Settlement-officers up to 1890–91, is not available in the Board's office. The Conservators have been called upon to submit the information forthwith and, when received, a report will be separately submitted.

5. *Demarcation.*—The length of the permanently demarcated line was 812 miles in the Northern and 1,531 miles in the Southern Circle. The cost was Rs. 9–9–0 and Rs. 12–6–7 per mile, respectively. The cost in the different districts of the Northern Circle varies very considerably, ranging from Rs. 2 to Rs. 21. For the Southern Circle the work done in each district and the cost per mile are not given, but only the total for the circle; the increase in the average cost per mile, however, in that circle, as compared with that of previous year, is due to the erection of more durable

marks in most districts. In addition to permanent demarcation, 245 miles in the Northern Circle were preliminarily demarcated; 14 miles of boundary were protected by fences or trenches; 782 miles of old lines were recleared and about 12,000 boundary marks were erected; in the Southern Circle, the proprietors of private forests adjoining Government forests in Salem, North and South Arcot and Madura were called upon to clear their boundaries under the Boundary Act; a few of them complied with the requisition, and in the case of others the Conservator has decided to execute the work departmentally and recover the cost from the parties concerned. Proposals have been received from the two Conservators to issue a uniform set of rules for forest demarcation. The matter is under the consideration of the Board and will be shortly disposed of. The work in Anantapur is said to be the best in the Northern Circle, and in the Nílgiris the original demarcation having been found to be unsatisfactory, the lines had to be recleared and fresh marks erected which has contributed to the heavy cost. In Kurnool six miles of boundary were cleared free of charge in return, it is reported, for permission to remove the produce cut.

6. *Surveys and Working Plans.*—The main work of forest survey is done by the Government of India Party which, beginning at the South of the Presidency, is gradually working its way northwards, Tinnevelly, Madura and Coimbatore being now in hand. The survey of forest areas in Bellary and Adoni is being carried out by the Madras Revenue Survey, which is now at work in those districts. Besides this, a certain amount of petty work, useful mainly for settlement purposes, is being executed by departmental surveyors temporarily employed.

The Government of India Survey Party was engaged as in previous years in the districts of the Southern Circle and turned out about 1,050 square miles of triangulation, 274 miles of traversing, and 440 square miles of topography in the survey year 1890–91. The outturn is satisfactory compared with the results of the two previous years, and the cost per square mile topographically surveyed has been reduced from Rs. 161 to Rs. 111. In April last the Board conferred with the Surveyor-General (India) on the question of cost, and measures were agreed on which will increase the outturn and reduce the cost to its normal rate. This will be done by concentrating Forest Settlement work on particular and adjoining districts, so that the Survey Department may find completed tracts for them to deal with, and not individual and isolated blocks which can only be taken up, some at one time and some at another, to the loss of both time and labour. The field season also will in future be lengthened as much as possible by starting the work earlier. An approximate survey programme for a term of years has also been agreed on.

In the Southern Circle temporary surveyors were employed for preparing maps for settlement purposes in North Arcot, South Arcot, Salem, Trichinopoly, Tanjore and South Canara. In Madura a deputy surveyor of the Madras Survey Department was employed in surveying certain forests in the Kotagudi valley, which it is proposed to take over under the control of the department. In the Northern Circle, departmental surveys were made in Ganjam, Nellore, Anantapur and Kurnool for settlement purposes.

The Madras Survey Department is surveying, in connection with its own work, the forest areas in the Adóni and Alúr taluks of Bellary, and in the Anantapur district.

The cost of the departmental surveys in the Northern Circle was Rs. 4,782, and that in the Southern Circle was Rs. 10,249. The cost of the survey by the Government of India Party for the financial year was Rs. 70,564. For the corresponding survey year the cost is given approximately as Rs. 69,856.

In the matter of working plans the department is still weak: neither settlement nor organization is sufficiently advanced for the purpose, and all that can be done for the present is to work on annual schemes, and to collect data for use later on.

In the Southern Circle, the working plan of the Cauvery south bank plantations in Trichinopoly is reported to have been adhered to; that of the Morur block in Salem was deviated from—it is not stated why. The working plan of the Walayar reserve in

South Malabar was sanctioned during the year, and a few other working plans are under revision or preparation in Madura and South Coimbatore districts. The working of the Nilambúr and Sholakarai blocks according to their working schemes is reported to have been most satisfactory. In Tinnevelly the results of the coupé system have been carefully recorded as a preliminary to the preparation of working plans, and so in South Arcot an enumeration of the growing stock in two of the reserves was made at a small cost by way of collecting data for the preparation of working plans. The working schemes laid down for the casuarina plantations in North Arcot are reported to have been deviated from without authority.

In the Northern Circle, the few working plans that were laid down have not been adhered to and it is stated that no real progress can be made in the preparation of working plans for the next two years; meanwhile, however, rough annual schemes of operations will be drawn up in each district and submitted with the budget and will be adhered to as far as possible. As already stated, more than this cannot be expected until settlement is more complete.

7. *Fire protection.*—The subjoined abstract shows the area attempted, the area burnt and the cost incurred during 1890–91:—

Districts.		Area attempted.	Area burnt.	Expenditure during the dry season of 1890–91.	Cost up to the end of 1890–91.
		SQ. MLS.	SQ. MLS.	RS.	RS.
Northern Circle	Ganjam	517·97	22·31	1,316	5,594
	Vizagapatam	26·75	..	402	627
	Godávari	198·04	·77	650	1,522
	Kistna	212·68	2·94	1,071	5,699
	Nellore	184·15	4·03	848	3,228
	Cuddapah	818·52	39·44	6,168	37,131
	Kurnool	69·44	25·16	1,834	6,123
	Bellary	381·86	24·88	2,192	18,466
	Anantapur	125·34	·03	2,028	10,136
	Nílgiris	348·57	81·47	2,730	19,190
	Total ..	2,883·32	201·03	19,239	1,07,716
Southern Circle	Chingleput	36·40	·31	512	3,827
	North Arcot	872·17	3·71	2,289	20,083
	South Arcot	203·50	4·22	875	7,370
	Salem	48·40	·02	2,066	18,711
	Trichinopoly	124·61	..	215	2,552
	Tanjore	..	..	..	..
	Coimbatore	90·90	·05	2,315	12,305
	Madura	303·08	6·70	5,052	32,371
	Tinnevelly	165·99	4·22	4,174	20,243
	Malabar	174·35	7·31	3,344	20,967
	South Canara	25·59	·04	1,379	5,066
	Total ..	2,044·99	26·58	22,221	1,43,495

The cost of protection has slightly increased in both circles as compared with 1889–90—in the Northern Circle from Rs. 6–10–0 to Rs. 7–2–9 a square mile and in the Southern from Rs. 10–10–5 to Rs. 11. The percentage of area protected to the area attempted is, however, nearly the same being 93 per cent. in the Northern and 99 per cent. in the Southern Circle. In both circles the area under protection was slightly in excess of that in 1889–90, about 135 square miles having been added in the Northern and 183 in the Southern Circle. The increase in the cost in the Southern Circle is attributed to the unusual length of the fire season. The increase in the Northern Circle is not explained.

In the Sandúr leased forest a considerable area is said to have been burnt through the fire lines not being properly cut, chiefly owing to the delay in the commencement of firetracing and the employment of the Ranger on census work and Forest Settlement duty. In the Nílgiris 40,000 acres have been burnt in the Mudumalai leased forest. In Ganjam, Cuddapah and Kurnool the areas burnt are large; but no explanation is given by the Conservator. On the whole, the results of fire-protection attempted in both circles may be considered to be fair.

The Conservator, Northern Circle, suggests that the expenditure on areas under special protection should be separately accounted for, and not mixed up with ordinary unburnt unprotected areas. The suggestion is a good one and should be considered with reference to paragraph 3 of the Government Order, dated 28th July 1891, No. 678, on the Government of India review of the report for 1889–90. Indeed, more method generally appears to be needed in the direction of taking up and maintaining areas under special fire protection; as it is, areas appear to be taken up in one year and dropped in the next, large areas with indefinite boundaries and ineffective protection take the place of small definite and really protected blocks, and as the Conservator, Northern Circle, says, the figures are vitiated and confused by the mixing up unprotected with protected blocks. The Board does not believe that any considerable area of unprotected forest escapes burning for a series of years; it may escape for one or two years, but it burns all the more disastrously sooner or later, and the addition of such areas to the specially protected blocks, therefore, renders the figures for the latter useless. The Board believes only in special protection as a real safe-guard, and the blocks to be so protected, should, therefore, be carefully selected, thoroughly firetraced and permanently maintained. They may be extended as money and establishment permit, but it should be impressed on District Forest-officers, that a little well protected is better than a great deal badly protected, that a small area the whole of which is continuously protected is better than a far larger area, half of which is burnt one year and the other half the next.

8. *Grazing.*—The following table shows the receipts from grazing during the year under review as compared with those of the year previous :—

Districts.	1889–90.	1890–91.
	RS.	RS.
Northern Circle.		
Ganjam	7	4
Vizagapatam	23	102
Godávari	1,959	5,527
Kistna	48,541	41,170
Nellore	16,036	13,075
Cuddapah	3,814	7,629
Kurnool	5,419	9,021
Bellary	878	1,074
Anantapur	1,154	1,657
Nílgiris	1,639	2,011
Total	79,470	81,270
Southern Circle.		
Chingleput	2,087	2,337
North Arcot	4,466	7,885
South Arcot	2,683	4,829
Salem	12,016	14,096
Trichinopoly	6,358	6,515
Tanjore	739	576
Coimbatore	33,432	28,777
Madura	2,321	2,319
Tinnevelly	158	838
Malabar	115	573
South Canara	...	...
Total	64,375	68,745

As observed in the Board's review for 1889–90, the revenue under this head shows a tendency to rise, notwithstanding the fact that the rates have not been raised anywhere in the Presidency; indeed, in some cases, they have been reduced, and it is partly to this fact and partly to the increased facilities provided for grazing that the rise is due. The increase in the Northern Circle is chiefly in the Godávari, Cuddapah and Kurnool districts. The increase in Godávari is attributed to a reduction in the rates of fees which has stimulated grazing. In Cuddapah it is attributed to better supervision and to an increase in the number of foreign cattle, chiefly from Nellore;

grazed in the reserves. That in Kurnool has not been explained. Against these increases has to be noticed a large decrease in Nellore and Kistna. In the latter district the contract system has always obtained, but the contractors were compelled to reduce the fees charged by them to the rates leviable under the rules, and the result has been a falling off in the revenue to the extent of Rs. 7,371. The Collector is in favour of the departmental collection of grazing dues and is introducing it experimentally in parts; as he says, there is a great deal to be said in its favour and notably the fact that the ryot is dealt with direct and not through a middleman, who, unless tied down by very strict conditions and supervision, must always be under the temptation to increase his profits, illicitly, at the expense either of the ryot or of Government. The Board observes, also, that the Collector claims for it greater control, the particular advantage which Conservators have hitherto claimed for the contract system. In Nellore the revenue is realized in the shape of rent on grazing lands. The lands are leased out annually in public auction and the result of the sales depends on competition among bidders and other causes.

In the Southern Circle, the principal variations are in North and South Arcot, Salem and Coimbatore. There has been an increase in the three first districts and a decrease in the last. In North Arcot the increase is attributed to better supervision, and in South Arcot to increase in the number of foreign cattle grazed in the reserves. In Salem the increase is not explained; but, with reference to the Board's remark in its review of the report for 1889–90, the Collector reported that the increase resulted from the removal of the limit imposed on the number of cattle admitted into the reserves and the abolition of free-grazing hitherto allowed. The decrease in North Coimbatore is attributed to a falling off in the number of foreign cattle owing to an outbreak of cattle-disease in Kollegál and Satyamangalam forests, and that in South Coimbatore to a portion of the revenue of 1890–91 having been collected and credited in 1889–90. In spite of the generally unfavorable season there have been no complaints of restrictions in regard to grazing, probably because most of the reserves were virtually thrown open.

The information regarding the area available for free-grazing and the area closed to grazing in each district called for in Government Order, dated 7th May 1890, No. 314, has not yet been furnished by Collectors. The system of cutting the grass instead of grazing it down appears to have been tried in South Coimbatore, where a sum of Rs. 1,648 is said to have been realized by the sale of grass in 1890–91; but the particulars of the experiment have not been reported. The attention of the District-officers has been drawn to the remarks of Government on this subject contained in Government Order, dated 28th July 1891, No. 678. The number of cattle grazed is given in the Southern Circle as 569,786 and the incidence per head is As. 1–10. The number of cattle has increased, and the rate per head fallen in comparison with the figures of the preceding year. Similar statistics have not been furnished for the Northern Circle. The omission should be supplied in future reports. The extent of area grazed over not having been reported, the average number of cattle per acre cannot be given. The order of Government requiring information to be given in the report regarding the extent of progress in grass-cutting and hay-making was received too late for the information to be furnished in the present report. The point should be borne in mind in submitting future reports. Attention has been called to the importance of this subject in the Government Order quoted above and Government has ordered experiments to be made in districts in which good fodder grass is available to see which of the two systems, viz., throwing open areas to grazing or keeping them closed and cutting and selling the grass, is more remunerative and more advantageous to the cattle of the neighbourhood.

There can, of course, be no question that to the forests themselves any system of cutting by hand whether it takes the shape of ensilage, hay-making, or simply carrying away the green grass, must be preferable to allowing the cattle in to graze for themselves: the difficulty lies in the presumably prohibitive cost of the former. No definite experiments, however, appear to have ever been actually carried through to test the truth of this presumption, and it may be that, taking other things into consideration, viz., the protection to seedlings and the consequent improvement of

the forest growth, the decreased liability to fire, if the cutting of the grass takes place early in the dry season, &c., it may be found that the cutting by hand is just as economical as grazing. As now ordered by Government, therefore, the matter should be fully tested in special localities selected by the Conservators.

9. *Police.*—The number and result of prosecutions for offences against Forest laws, as compared with those of the previous year, are shown below, and the figures may be accepted as generally satisfactory :—

	Cases pending.	New cases in the year.	Convictions.		Acquittals.		Compounded.		Withdrawn.		Cases pending at the close of the year.
			Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Northern Circle.											
1889–90 ..	281	1,355	680	1,672	287	954	511	937	..	..	* 158
1890–91 ..	145	1,905	841	1,646	262	950	541	1,289	..	..	406
Southern Circle.											
1889–90 ..	207	2,679	904	2,157	385	1,308	1,187	2,750	92	246	318
1890–91 ..	318	3,672	1,388	3,777	345	1,214	1,512	3,682	103	297	642

* In this figure 13 cases were included by mistake.

In both circles, the number of offences reported in 1890–91 is more than that in 1889–90, the percentage of convictions to the total number of offences is about 44 in the Northern and 38 in the Southern Circle against 50 and 33, respectively, in the previous year. Including cases compounded, the percentages are 72 and 79 against 88 and 78 respectively. The complaint of inadequacy of establishment as being the main cause of the insufficient protection will, it is hoped, be shortly removed.

As regards the Southern Circle, the increase in the number of offences occurs mainly in North and South Arcot, Trichinopoly, Tanjore and Coimbatore. The increase in North Arcot is attributed to the energy and activity of the District Forest-officer. In this district two important cases, in which certain old offenders were involved, led to convictions before the Sessions Judge and another wealthy merchant was fined heavily for removing produce without permit. The increase in South Arcot and Trichinopoly is chiefly the result of the detection of large herds of cattle found grazing in the reserves without permits. In Salem the large number of cases is attributed to the detection of illicit fellings carried on in Government forests with the connivance of the contractors of the adjoining private forests. In Tanjore a case of unlicensed shooting was met with a severe fine. In South Coimbatore there is a striking increase, which is attributed to the activity of the Range officers. The increase in the Northern Circle occurs chiefly in Vizagapatam, Godávari and Kistna. The cause of the increase in Vizagapatam is not reported. In Godávari the increase was in the Bhadráchalam agency, where a large number of cases of illicit fellings by the resident timber-dealers supplying the Rajahmundry market was detected. In Kistna the increase is chiefly in grazing without permit. The Conservator of the Northern Circle notes the large number of cases in Ganjam in which conviction was not secured. This is unsatisfactory, and as it must be either the fault of the Forest Department or the Magistracy, the Collector is requested to look into the records of the cases and take steps to amend matters. Protection in Ganjam, indeed, appears to be ineffectual, for the Conservator observes of this district also that the wholesale manner in which cases have been compounded has had a demoralizing effect as it has tended to encourage illicit removals. This, of course, is to be expected and must be guarded against: compounding is a convenience to both parties, and there is probably, therefore, a tendency to overdo it.

Looking generally into the statistics of offences, which vary considerably in different districts, the Conservator, Northern Circle, expresses a doubt as to whether the returning of a small number of offences is a necessary indication of efficient protection as he believes that generally only a small portion of the offences actually committed is ever reported. This may be the case, and in one instance, that of the Nílgiris, the District Forest-officer admits that it is: but if it is, it is clear that

the District officers have not been exercising sufficient supervision over the officials employed on protective and preventive duty.

10. *Natural reproduction.*—The remarks of the Conservators on this important subject are full and interesting. They establish the broad fact that, where protection is efficient both from fire and grazing, the natural gowth is excellent; where it is not, the natural growth is poor: this fact, of course, is no new one, but it is consoling to be re-assured of it, and for the Forest officer to know that all that he has to do is to protect—and possibly direct by improvement cuttings—and that nature will do the rest: protection from *fire* is a mere matter of money and labour, but to combine protection from *grazing* with the necessities of the ryot and the grazier is more difficult. In some cases it will be possible to allot reserves either wholly for timber or wholly for grazing, and there the difficulty will not arise, but in the majority of the reserves grazing and small timber must go together and the reconciliation of the conflicting interests of the two is a matter that will tax the abilities of Forest officers. It is, in fact, the *crux* of forest work in this country.

One thing needs especial mention, and that is the "marvellous growth" in the Anantapur reserves, protected by walls, built, the Board believes, in the great famine. This, of course, only means effective protection, and it is a question for consideration if more should not be done in the way of fencing. The difficulty has been the matter of cost; but if railway lines can afford to be effectually fenced, there would seem to be no reason why forests should not, at any rate, where the forests lie in large compact blocks. Such fencing would assist most materially to protect both from fire and from thieves, and with protection from the latter, all the obnoxious transit rules could be abolished.

To take particular instances, in the Northern Circle, the Conservator mentions the case of the Peddapalle forest in Vizagapatam, which was under special protection for five years, as a striking instance of natural reproduction; in Kistna, the Bollapalli and the Kondapalli, the Kondávíd and Bellamkonda reserves are reported to contain good natural growth. In Nellore, in the Sríharikót forest, experiments were made to increase reproduction by cutting the roots of the *Eugenia jambolana* and the result is reported to be satisfactory, many shoots having come up. Experiments were also made in the felling of casuarina trees in Nellore and it was found that the best season for coppicing was from September to November and that the coppice was best when under shade and when the length of the stem left was not less than 4 feet. In Cuddapah, the growth of red sanders from seedlings is reported to have been successful; the ordinary bamboo seeded in most parts of Cuddapah and in the Nallamalais of Kurnool. In the Muchukota and Kothakota forests of Anantapur, which are specially protected by stone walls, the natural growth, as already stated, is said to be marvellous. In the Nílgiris, the reproduction in the sholas and the growth of coppice shoots in the *Eucalyptus* plantations are reported to be satisfactory.

As regards the Southern Circle, the reproduction from seed of bamboos in the Nágalápuram reserve in Chingleput, the germination of sandal wood seeds in Salem, the reproduction from coppice in the Sholakarai block in South Coimbatore, and the growth of kongoo seedlings in places, where clean cuttings have been made in the evergreen forests of Tinnevelly, are reported to be noteworthy. In the Tindivanam and Villupuram ranges in South Arcot, reproduction by coppice is said to have failed owing to the unfavorable character of the season; the coppice from casuarina stools in the Cuddalore range was also a failure. In North Arcot and Salem the growth in the open areas is said to have been very poor, chiefly owing to over-grazing. In the mixed high forests of South Coimbatore, in several of the valleys and hill slopes in Madura and in parts of North Malabar, the unsuitable nature of the soil and the thick under-growth of grass and thorny shrubs have retarded natural reproduction. Mr. Porter is reported to be making careful experiments with regard to reproduction on the Anaimalais and the results should be set forth in the next report. With reference to the remarks of the Government of India on the report for 1889–90, the Board has recently requested Conservators to instruct District Forest-officers to maintain notes of their observations regarding the habits and wants of important species of trees, and the Board trusts that a continuous record will thus be formed, which will be found of use in framing the minor details of working plans in days of more scientific management than is the case at present.

11. *Artificial reproduction.*—The amount spent on topes, plantations and cultural operations is shown below:—

		Area.	Cost during the year.			Area.	Cost during the year.
		ACS.	RS.			ACS.	RS.
Southern Circle..	Plantations ..	12,170	29,108	Northern Circle.	Plantations ..	7,689½	10,700
	Topes	18,891	7,586		Topes	6,898	2,380
	Other areas ..	4,378	2,148		Other areas ..	1,964⅝	4,686
	Total ..	35,439	38,842		Total ..	16,552⅛	17,766

While the area in the Southern Circle was nearly the same in 1890–91 as in the previous year, the cost shows a large increase, chiefly under topes and plantations. The increase is attributed to the replanting of certain areas already included in previous returns and not shown as "added during the year" and to the cost of wire-fencing put around the Gundan shola which was included under plantations and the Kodaikánal shola which was shown under topes in the Madura district. In the Northern Circle, the area shows an increase, while the cost has fallen. In North Arcot the Conservator brought to notice that a number of topes borne on the books of the Forest Department are missing and it is believed that they have been alienated under darkhast rules. The matter has been referred to the Collector for inquiry. Both in North and South Arcot considerable areas were replanted with casuarinas; cultural operations have also received attention in these two districts and seeds were sown either broadcast or in patches; but the season was generally unfavorable. In Trichinopoly and Tanjore, the replanting of casuarina plantations was undertaken over considerable areas. In South Coimbatore the failure of the monsoon caused considerable damage to plants as well as seedlings. The plantation in the Gundan shola in Madura was extended by the addition of a few acres; in Tinnevelly the seeds of the *Acacia planifrons* were sown along with the agricultural crops, but the result was unsuccessful owing to the failure of the monsoon. The District Forest-officer considers that this combination of forestry with agriculture is worthy of further trial and points out that it has been very successfully tried in Tunis. In South Malabar, the planting of mahogany, teak and bamboo was continued. The *Swietenia mahogani* having been found to be subject to the attacks of the borer, it is being replaced by the *Swietenia macrophylla.*

In the Northern Circle, the date was successfully sown in Ganjam, the area under casuarina plantation in Godávari was increased, and Eucalyptus was newly planted. In Kistna casuarina and *Terminalia tomentosa* were planted; tamarind, margosa, soap-nut and other seeds were sown broadcast and 10,000 seedlings of *Eugenia jambolana* and *Terminalia tomentosa* are reported to have been planted on the Bezváda hill side. The casuarina seeds sown broadcast in the Nellore plantations germinated, but the seedlings are said to have perished for want of rain. The plants of *Melia Indica*, *Cassia auriculata* and *Albizzia amara*, the result of sowings in the previous year, are said to be thriving. There have been no plantations or cultural operations in Vizagapatam, Kurnool and Bellary; palmyras were sown in Cuddapah and Anantapur. In the Nílgiris, the sholas have been planted with various species of plants.

12. *Improvement fellings.*—The subject of improvement and restoration fellings has not been systematically treated in the Conservators' reports, although attention was prominently called to the defect in paragraph 13 of G.O., dated 24th November 1890, No. 957. The matter is an important one, for if protection is a *sine quâ non* for growth at all, improvement fellings are a *sine quâ non* for growth of any value. The Board is aware that Forest officers have so far had but little time to carry out works of improvement of any sort, but this stage is now being passed, and District Forest-officers should have the urgent need impressed on them for adopting some sort of fellings more scientific than the system under which the purchaser selects his own tree, and takes only so much of it, as he pleases. If departmental fellings cannot be undertaken all at once, something in the way of marking the trees to be felled by the permit-holders might, perhaps, be attempted.

In the Southern Circle in Tinnevelly in the *coupés* worked under the coppice with standard system, the whole growth was cut down flush with the ground and the stumps given a chance of reproducing shoots and the results are said to be very encouraging. In the Northern Circle, thinnings of bamboo clumps and the cutting back of badly-grown trees in Cuddapah and improvement thinnings in the Rámandrúg range in Bellary are mentioned among works of improvement.

13. *Exotics.*—The appendices to the Conservators' reports contain the results of experiments in exotics. Dates of different species were tried. They failed in some districts and flourished in others, so that the experiment is still inconclusive. The Conservator's reports do not give sufficient information as to the supposed causes of failure; this should be seen to in future reports; it is not sufficient to record the mere fact of failure. In some cases, it has been proposed to discontinue the experiment, but this should not be permitted: if particular localities are proved unsuitable, others should be tried; but the introduction of the edible date is too important a matter to be shelved merely because of a few failures. The Divi divi is growing well in North Arcot. The Eucalyptus is still a failure in the plains, through growing fairly at moderate elevations on the Tinnevelly ghâts. Of bamboos, there are numerous varieties; one sort (*D. longispathus*), obtained from Burma, was tried in Chingleput and was fairly successful. The species tried in North Malabar (*Dendrocalamus Brandisi*) is reported to be doing well. In South Canara, the sandy soil as well as the proximity of the casuarina proved unsuitable to the growth of *Bambusa longispathus*. The mahogany is being tried in Kistna, Chingleput, Madura, Tinnevelly, South Arcot, Cuddapah, North Arcot, Tanjore and North Malabar. In the four last districts the experiment has proved a failure. The sericultural experiment in Chingleput has not been financially successful, and the question of continuing it is under consideration; but it has hardly as yet had fair play in the matter of careful supervision and protection, and is still too young to be considered conclusive. Various kinds of exotics were tried in the Lovedale nursery in the Nílgiris; some of them failed altogether.

14. *Buildings and roads.*—The amount spent on roads, buildings, &c., is shown below:—

	Northern Circle.		Southern Circle.	
	Actual expenditure.	Revised estimate.	Actual expenditure.	Revised estimate.
	Rs.	Rs.	Rs.	Rs.
Roads	9,020	15,200	21,390	23,000
Buildings	15,447	14,550	22,301	20,000
Oher works	548	1,350	234	1,000
Total ..	25,015	31,100	43,925	44,000

The allotment in the Southern Circle was almost wholly utilized; but in the Northern Circle, though there is an improvement, as compared with the previous year, in the percentage of the actual expenditure to the budget allotment, the total amount spent in 1890–91 is very nearly the same as in 1889–90.

The principal road-works in the Southern Circle were—

1. The Tenmalai ghât road in South Arcot.
2. The road from Sobapanapuram to the rest-house on the hill in Trichinopoly.
3. The improvement and extension of the tramway line on the Anaimalai.
4. The completion of the Alagar Hill road in Madura.
5. The construction of several minor roads, bridle paths, inspection paths, &c., in Tinnevelly and Malabar.

The Conservator, Southern Circle, has furnished a detailed list of forest buildings, with cost and other particulars, though the list is said to be not complete. Most of the buildings are rest-houses, inspection sheds or offices or quarters for Range officers, &c. The two largest in the list are the buildings intended for the residence of the District Forest-officers of North and South Malabar, costing Rs. 12,377 and Rs. 13,469 respectively.

In the Northern Circle, the principal road-works were—

(1) Three new roads in Ganjam.

(2) Some incomplete roads in Vizagapatam.

(3) Two new roads, 6 and 7 miles long, in Godávari.

(4) Two roads in Kistna.

(5) Several minor roads in the Ceded districts and in the Nílgiris.

Several rest-houses were built in Ganjam, Godávari, Kistna, Bellary, Anantapur and Nílgiris and old buildings were repaired in other districts.

15. *Tramways.*—The only forest tramways are two lines in Nellore and one in North Arcot and one in Coimbatore. The comparative cost of the transport of wood by the tramway and by common cart is more correctly calculated than in last year, by taking the depreciation of plant at 6 per cent. and the interest at 4 per cent. on the capital cost. The rate in Nellore and North Arcot is given in terms of 1 ton per mile, while in South Coimbatore it is given in terms of 1 cubic foot per mile. In all the districts the cost by tramway shows a saving; in North Arcot and Coimbatore it is very small; but, as pointed out by the Government of India in its review of the report for 1889–90, there are considerations which cannot be taken exactly into account in figured calculations, but which, nevertheless, are most material in comparing the results of the working by tramway with that by country carts. The District Forest-officers, North Arcot and Coimbatore, mention the following points:—

(1) The quantity removed by means of the tramway is much greater than that by country carts.

(2) The tramway enables the department to fell and remove even inferior classes of wood which could not be removed without loss by country carts.

(3) If the tramway line had been extended further, the profit would have been greater.

(4) The working plan does not allow of full use being made of the working capability of the line.

(5) Risk of loss, as in the case of advances to cartmen, has been removed.

(6) The difficulty of procuring carts at particular seasons has been obviated.

(7) The removal of produce is assured, Government being independent of cartmen who might strike or ask higher rates.

These may be summed up generally by saying that the tramway has the advantage of ease, convenience and control, and, in workings of any size, economy.

16. *Yield and working.*—The subjoined statement shows the outturn for the year:—

		Timber including sandalwood.	Fuel.	Bamboos.	Minor produce.
		C. FT.	C. FT.	NO.	VALUE IN RS.
By Government Agency ..	Northern Circle	183,296½	1,211,946	137,095	9,756
	Southern ,, ...	153,815	900,366	42,478	54,362
By purchasers	Northern ,, ...	1,940,584	4,201,280	11,941,448	2,50,676
	Southern ,, ...	1,484,128	5,854,223	6,066,459	3,42,815
By free grants	Northern ,, ...	30,046	..	14,310	588
	Southern ,, ...	10,628	400	21,657	114
Total ..	Northern ,, ...	2,153,926½	5,413,226	12,092,853	2,61,020
	Southern ,, ...	1,648,571	6,754,989	6,130,594	3,97,291

The information required in paragraph 8 of Government Order, dated 28th July 1891, No. 678, regarding the cause of the low price of timber and fuel has not been furnished in the Conservators' reports, the Government Order having been communicated too late. Conservators have, however, since reported that the price shown is mainly that of the lower class timbers and fuel, and that the amount of good timber included is small, the public demand being met chiefly by imported Burmah woods: for the lower class timbers and fuel the prices are low, because they represent merely the seigniorage rates, which for such produce are advisedly, in the interests of agriculturists and of the poorer ryots, kept low. The matter is one, however, which requires further investigation on the lines suggested by the Government of India; for, though it would be extremely inadvisable to raise the price of fuel and agricultural timber,

the prices quoted, viz., 9 pies gross and 4 pies net per cubic foot, are assuredly not the rates at which the ryot can obtain even fuel, much less timber of anything like good quality.

The outturn of timber under departmental operations shows a decrease in the Southern Circle. The decrease occurred chiefly in North Arcot, where the demand for redwood was slack; in South Coimbatore, where the stock of previous years remained unsold; in South Arcot, where the removal of timber was made by purchasers under the contract system; and in Madura, where felling operations had to be restricted with reference to the large imports from Travancore on one side and from Coimbatore and Pálghat on the other. There was an increase under fuel chiefly due to the large demand by the South Indian Railway Company in South Arcot and by the cotton mill companies in Tinnevelly, as well as to extensive fellings under preliminary working plans in Madura and under the coupe system in Tinnevelly. The increase under bamboos is due to the large number collected departmentally in Madura and South Malabar. The increase in the value of minor produce is chiefly in South Canara where more valuable species were collected and in South Coimbatore where the Range-officer is reported to have shown great zeal and energy in the work.

In the Northern Circle, there has been an increase under each of the items, timber, fuel, bamboos and minor produce, collected by departmental agency. The increase in timber occurred chiefly in Godávari, Cuddapah and Nílgiris; that in fuel was in Godávari, Nellore, Cuddapah, Kurnool and Anantapur; in bamboos, the increase occurred in Kistna and Anantapur; and that in minor produce, in Ganjam and Nellore. The receipts from departmental work were highest in South Coimbatore (Rs. 55,500), South Canara (Rs. 46,500), Kurnool (Rs. 44,300), South Malabar (Rs. 43,300) and North Arcot (Rs. 41,900). The value of stock on hand at the end of the year was Rs. 56,480 in the Southern and Rs. 28,255 in the Northern Circle.

The receipts from removals by private agency amounted to Rs. 7,61,709 in the Southern Circle and Rs. 5,66,915 in the Northern, against Rs. 6,96,965 and Rs. 4,69,363, respectively. The increase in the Southern Circle is chiefly under bamboos and minor produce. Under timber there was a decrease both in quantity and value, which the Conservator attributes to the gradual abolition of the seigniorage system in favour of departmental cutting. The increase under minor produce is said to be mainly due to the transfer of certain items of tree rents from Land Revenue Miscellaneous to Forests in the Chingleput, Salem and Trichinopoly districts. The question of crediting tree rents in Salem will be separately submitted to Government. The increase in the Northern Circle occurs under all the sub-heads and in all the districts except in Cuddapah and Nílgiris. The increase has not been explained. The chief revenue-producing districts under private agency were North Arcot (Rs. 1,55,000), Salem (Rs. 1,44,000), Cuddapah (Rs. 1,13,000), Godávari (Rs. 1,10,000) and Kistna (Rs. 1,01,000).

The total yield in 1890–91 is compared with those of the three previous years in the annexed statement:—

	Northern Circle.			Southern Circle.		
	Timber and fuel.	Bamboos.	Minor produce.	Timber and fuel.	Bamboos.	Minor produce.
	C. FT.	NO.	RS.	C. FT.	NO.	RS.
1887–88	7,775,639	9,087,693	1,24,277	7,677,600	Not known.	2,60,661
1888–89	8,935,990	4,888,271	1,28,105	9,732,988	6,220,090	2,79,884
1889–90	6,996,159½	7,178,663	2,26,386	9,760,821	5,515,518	3,11,245
1890–91	7,567,152½	12,092,853	2,61,020	8,403,560	6,130,594	3,97,291

The average cost, as given by the Conservators, of departmentally-collected produce varies very widely in the two Circles. In the case of timber, it cost annas 4 pies 3 per cubic foot in the Southern Circle, but only 2 annas in the Northern Circle; firewood cost 6 pies per cubic foot in the Southern and 8 pies in the Northern Circle; and bamboos, each 4 pies against 1 pie. The prices realized from the different kinds of produce exhibit similar differences. Timber fetched annas 10 pies 4 in the Southern Circle, but only annas 3 pies 7 in the Northern; fuel, anna 1 pies 4 against anna 1

pies 2; and bamboos, anna 1 pies 2 against only 3 pies. In the case of produce removed by private agency, the average cost was anna 1 pies 6 against anna 1 pies 4 for timber; pies 6 against pies 4 for fuel; and pies 3 against pie 1 for bamboo.

In calculating the cost of produce, no allowance has been made by Conservators for the proportion of the cost of the B. or permanent establishment charges to be debited on account of supervision. In a subsequent communication, however, they have recommended that this proportion should be that which the receipts *plus* the (A) expenditure under each *particular head* bears to the total receipts *plus* the (A) expenditure *under all heads*; this proportion seems fair, for, ordinarily, the (B) or general establishment charges may be considered divisible rateably among the receipts, and the extra share debitable to work done departmentally may be considered as sufficiently represented by the actual expenditure thereon under A; it may be suggested that the revenue from timber, &c., worked other than departmentally is too heavily weighted by this method, but it must be remembered that though the actual expenditure shown under A under that head is generally small, yet the real cost on account of general supervision is large, for the large establishments of guards, watchers, permit issuers and tannadars have to be entertained mainly to meet the requirements of this particular system of working, and are not nearly so necessary under the system of departmental working; the B charges may, therefore, fairly be divided rateably among the various heads on the basis of the sum of the receipts and the A expenditure thereunder. Adopting this proportion the Board has worked out the net profit under the two systems as follows:—

Items.	Southern Circle.						
	Quantity sold. (Form 71.)	Amount of sale-proceeds. (Form 71.)	Charges.			Net profit.	Rate of net profit (column 7 ÷ column 2).
			A. (Form 64.)	B.	Total.		
1	2	3	4	5	6	7	8
Departmental working.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.
Timber and fuel in .. C. ft.	1,002,268	1,88,405	68,438	57,374	1,25,812	62,593	0 1 0
Bamboos .. .. No.	40,429	3,069	985	934	1,919	1,150	0 0 5
Sandalwood .. .. C. ft.	2,699	19,040	1,082	4,142	5,224	13,816	5 1 11
Minor produce in .. Mds.	22,749	54,362	28,760	19,272	48,032	6,330	0 4 5
Private working.							
Timber and fuel in .. C. ft.	7,314,045	3,26,331	19,285	79,456	98,741	2,27,590	0 0 5
Bamboos .. .. No.	6,044,381	93,010	5,535	22,802	28,337	64,673	0 0 2
Grazing	Not reported.	69,123	4,064	16,746	20,810	48,313	Not known.
Minor produce	Do.	2,73,245	16,063	66,182	82,245	1,91,000	Do.

Items.	Northern Circle.						
	Quantity sold.	Amount of sale-proceeds.	Charges.			Net profit.	Rate of net profit (column 14 ÷ column 9)
			A.	B.	Total.		
	9	10	11	12	13	14	15
Departmental working.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.
Timber and fuel in .. C. ft.	1,344,814	1,29,209	75,667	53,362	1,29,029	180	0 0 0·002
Bamboos .. .. No.	86,545	1,803	650	612	1,262	541	0 0 1
Sandalwood .. .. C. ft.	1,214	11,229	1,574	3,201	4,775	6,454	5 5 0
Minor produce in .. Mds.	17,106	9,756	5,833	4,180	10,013	— 257	— 0 0 2·9
Private working.							
Timber and fuel in .. C. ft.	6,110,534	2,41,988	14,106	63,994	78,100	1,63,888	0 0 5
Bamboos .. .. No.	11,935,284	72,924	4,253	19,294	23,547	49,377	0 0 1
Grazing	Not reported.	82,775	4,738	21,502	26,240	56,535	Not know.
Minor produce	Do.	1,69,228	9,794	44,427	54,221	1,15,007	Do.

Note.—The figures under private working in columns 4 and 11 were arrived at by distributing the lump figure under A-11 among the several sub-heads in proportion to the receipts under each sub-head.

It will be seen that as regards timber and fuel and bamboos, the departmental working is the more profitable in the Southern Circle, but not in the Northern, even after deducting the proportionate cost of the permanent establishment. There are no data available for comparing departmental with private working as regards grazing and minor produce.

17. *Financial results.*—The following abstract shows the financial results of the year:—

	Receipts.	Expenditure.	
		A.	B.
	Rs.	Rs.	Rs.
Northern Circle ..	7,45,547	2,43,096	2,48,459
Southern ,, ..	10,49,861	4,20,728	3,41,001
Total ..	17,95,408	6,63,824	5,89,460
		12,53,284	
Balance ..		5,42,124	

The revenue shows a large increase in both Circles, as compared with the figures of the preceding year; while the expenditure, though it has also risen, does not exhibit such striking differences. The increase under revenue in the Northern Circle is attributed to the receipt of revenue from the Rampa forests which were brought under the control of the department during the year; to the transfer of certain items from Land Revenue to Forests in Kistna; to the sale of a large quantity of railway fuel in Kurnool and of sandalwood in the Nílgiris; and to increased receipts from minor produce in all the districts except Cuddapah. The increase in the Southern Circle is chiefly under I (*e*) and II (*e*), Minor produce removed by Government and by private purchasers; the former mainly in South Coimbatore and South Canara, and the latter in North Arcot, Chingleput, Salem and Trichinopoly.

Compared with the revised estimates, the actuals were 8 per cent. more under receipts and 1 per cent. less under charges in the Southern Circle, and 11 per cent. more under receipts and 3 per cent. less under charges in the Northern Circle.

The revenue realized is the highest on record and the surplus has exceeded 5 lakhs—a result which is unprecedented. The districts that contributed most to the surplus are, North Arcot (Rs. 1,38,000), Salem (Rs. 96,000), Kurnool (Rs. 88,000), Godávari (Rs. 75,000), Kistna and Cuddapah (Rs. 70,000 each). The only district where a deficit occurred in the Southern Circle was Madura (Rs. 8,000); in the Northern Circle deficits occurred in Ganjam (Rs. 14,000) and Nílgiris (Rs. 16,000) as in last year and in Vizagapatam (Rs. 1,000). The districts that produced the largest revenue are North Arcot (Rs. 2,01,000), Salem (Rs. 1,54,000), Kurnool (Rs. 1,44,000), Cuddapah (Rs. 1,35,000), Godávari (Rs. 1,22,000), Kistna (Rs. 1,03,000), South Coimbatore (Rs. 1,03,000) and North Coimbatore (Rs. 1,01,000).

General Remarks.

18. The year appears to have been a normal one, with the usual amount of sickness inseparable from forest life, and of misconduct on the part of subordinates to be expected from the many opportunities offered by forest work. At the same time, the report of the year's operations and their financial results bear testimony to the good work done by the District officers, and show that under all the disadvantages of want of men and the confusion caused by simultaneous settlement work, District officers are making good steps forward in the organization and exploitation of their district forests. Three things, however, remain to be done: settlement must be completed, strong and sufficient establishments must be placed in each district, and real progress must be made in the direction of conservancy and improvement. Till settlement is complete and till the District officer knows what area is his to deal with, there must be confusion, which must impair control; the Board has it in consideration, as already stated, to remedy this by concentrating settlement work. Strong establishments based on the present requirements of each district have recently been sanctioned by Government; it only remains for district officers to proceed vigorously with their real forest work. Such work has hitherto

taken too much the shape of a mere toll-bar placed between the ryot and the forests, but little has been done in the way of either improving or cheapening the supply of forest produce to the villager, and it is not to be wondered at, therefore, if the department is not popular; what is wanted is not the mere collection of revenue, but the spending of that revenue in the improvement and cheapening of forest produce of all kinds, so that the villager may visibly see that he is getting something in return for the restrictions and inconveniences which are placed upon him. This is a matter of such importance, not only to the Forest Department, but even to the State, that the Board feels bound to lay stress on it. In a recent inspection report, Colonel Walker reported that efforts were being made to sell departmentally-cut fuel and timber to the ryots, at specially low prices on the borders of the forest. This is a practical step in the right direction, and the Board would like to see the same idea carried out elsewhere. The Forest Department cannot be said to be a complete success until the villagers have realized the great value of its operations to themselves.

(A true Copy and Extract.)

(Signed) H. A. SIM,
Acting Secretary.

To the Secretary to Government, Revenue Department, with two reports.
" Conservator of Forests, Southern Circle.
" " Northern "
Copy to the Collectors of all the Districts, except Madras.
" " Examiner of Forest Accounts.

READ—also Proceedings of the Board of Revenue (Land Revenue), dated 17th November 1891, Forest No. 470.

ABSTRACT.—Submitting letter from the Conservator of Forests, Northern Circle, explaining certain discrepancies pointed out by the Board in the Administration Report of the Northern Circle for 1890–91.

Order—dated 12th December 1891, No. 1187, Revenue.

Forest, No. 261.

The Board's review of the operations of the Forest Department during 1890–91, which is submitted with the Proceedings read above, was received in the Government office on October 22, or nearly two months after the prescribed date. Arrangements have been made for the compilation in future years of a consolidated report for the whole Presidency in the Board's office, in lieu of the circle reports now separately prepared, and the Government trusts that, under this system, it will be found possible to observe greater punctuality. Moreover, the Forest establishment in the Board's office has recently been considerably strengthened and this should expedite the disposal of work.

2. *Area of forests.*—The extent of the various classes of forest under control of the department and the changes that have taken place during the year are shown in the table at paragraph 3 of the Board's review under three heads, viz., "reserved forests," "reserved lands," and "other forests." The areas shown in form 59 B, which is only given in the Northern Circle report, have been entered under "other forests." They are reported to be lands in the Cuddapah district reserved under orders issued prior to the passing of the Forest Act, and it is not understood why they have not been subsequently notified under section 25 of the Act, or proposed for formal reservation under section 4. In March 1883, Mr. Gamble explained, with reference to certain forests in Cuddapah, which were said to have been previously reserved, that the latter course was the safer and better of the two, in that it was not

clear whether a proper enquiry had been instituted into the rights and privileges of neighbouring villagers prior to reservation. Notifications under section 4 of the Act were accordingly issued for many of these forests, and the ordinary settlement procedure adopted. Early steps should now be taken to formally reserve the areas shown in form 59 B.

3. There is some doubt as to the entries in form 59 D under "other forests." In the Northern Circle it is stated that they relate to lands reserved under the orders of the Collector and exist only in Vizagapatam. If this is the case, the figures should be transferred to form 59 C, which shows the details of "reserved lands." It is observed that extensive areas in the Cuddapah district, reserved under notices issued by the Collector, are shown in this latter return. In the Southern Circle "reserved lands" are apparently taken to mean areas notified under section 4 of the Act, and "other forests" represent lands taken up under other orders. The additions during the year to the latter class of forest are said to be due to new areas selected in the Madura district for reservation, though it is not stated how these have been brought under control.

4. The absence of uniformity in these returns is to be regretted, but in future years a consolidated report for the whole Presidency will be prepared in the Board's office, and this fault will not therefore recur. Moreover, under the new forest policy, all lands taken up for reservation are eventually to be classed under the head of "reserved forests," and the confusion arising from the numerous divisions previously made will thus be obviated. This policy cannot, however, be fully developed for some time, and in the meanwhile it is desirable that the returns should, as far as possible, be simplified, and all areas under control should accordingly be shown under the head of "reserved forests" or "reserved lands."

5. In reviewing last year's reports, the Government remarked that the forest figures for each district should be compared with the areas at the disposal of Government, rather than with the cultivated areas. The second statement given in paragraph 3 of the Board's Proceedings complies with these instructions, though the headings of columns 4 and 8 convey the impression that they have been neglected. The statement in question rightly compares the areas under control with the aggregate of uncultivated areas, forests, and areas for which returns are not available. The Board fears that the selection of blocks for reservation on the lines newly laid down has not yet been taken up with energy, owing to the paucity of officers. This defect will shortly be remedied, for, under the scheme for increasing the superior staff, which has recently received the sanction of the Secretary of State, the department is to be allowed 34 officers on the upper controlling staff, besides 11 extra Assistant Conservators. The service is to be divided into an Imperial and a Provincial branch, and rules for regulating appointments to the latter have been issued by the Government of India. The want of officers should not, therefore, be a cause of complaint in the future, though the full sanctioned strength cannot of course be worked up to immediately.

6. *Settlement.*—The total area gazetted during the year as reserved forest exceeded that similarly notified in any previous year as shown below :—

—	1883–84.	1884–85.	1885–86.	1886–87.	1887–88.	1888–89.	1889–90.	1890–91.	Total.
Northern Circle	..	7	95	372	151	6	194	* 1,014	1,839
Southern ,, ...	725	388	413	312	564	398	113	360	3,273
Total ..	725	395	508	684	715	404	307	1,374	5,112

* This is the net value of the additions : 10 square miles were excluded in Vizagapatam owing to revised estimate of area.

In so far as this implies more speedy progress towards the completion of Forest Settlement, it gives ground for satisfaction. But it must be remembered that the area so notified is no criterion of the settlement actually performed during the year, and the Board admits that the progress of this work leaves much to be desired. Full information is, however, again not furnished in regard to the work of Forest Settlement-officers. In paragraph 8 of the Board's review of 1889–90, Conservators were

directed to show in future reports the particular stages reached in the numerous blocks remaining unsettled at the close of the year. An attempt has been made in the report of the Southern Circle to comply with these instructions, but no such information is given for the Northern Circle. It is therefore impossible to gauge the work done by the various officers, and the Government notes that the Board promises to submit a separate report on this subject as soon as the necessary information is supplied by the Conservators.

The statement given at paragraph 4 of the Board's Proceedings is in the form prescribed by this Government and approved by the Government of India. It purports to show the progress made during the year in forest settlements, but hardly fulfils this object. It is observed that the entries in columns 4 and 9 are identical, while the figures shown in column 3 as "additions during the year" apparently represent deductions due to the afforestation of unreserved lands and to rectification of areas. In future reports, column 3 should be kept for actual additions and column 4 may be omitted. The areas notified under section 4 during the year and the deductions due to improved registration should then be subtracted from the total of columns 2 and 3, and the result be shown in column 9 as the total unreserved area at the close of the year.

7. Judging from the returns now submitted, the Government is forced to the conclusion that the settlement is being needlessly delayed in several districts. In Ganjam and Vizagapatam the tardy progress is the result of entrusting the settlement to the ordinary district revenue staff whose more legitimate duties prevent them from devoting the requisite time and labour to this special work, and the Board should consider whether it would not be advisable to depute one of the four special officers to these northern districts. The delay in Anantapur and the Nílgiris is due to similar causes. In the latter district indeed it has recently been brought to notice that the work actually completed is of so unsatisfactory a nature that it will have, in several instances, to be thoroughly revised and a report on the subject has been called for. The delay in Cuddapah is serious, and the Government does not understand why the Board contemplates still further retarding the settlement, by awaiting the notification of the additional areas to be taken up under the policy enunciated in G.O., No. 844, dated 29th October 1890. It would be better to gazette at once as reserved forests all those areas in which settlement has been completed, and to notify subsequently as extensions such blocks as are required to form compact reserves. It is observed that eight blocks with an aggregate area of 31 square miles have been notified in this district since the close of the year.

In the Southern Circle the balance is heavy in North Coimbatore, and although the Board declares that the figures call for remark, no explanation of them is given. Of the 1,159 square miles in this district notified under section 4 of the Act, but remaining unsettled, notifications for three blocks with an aggregate area of 377 square miles appear to be pending in the Board's office.

8. When reviewing the forest administration reports of the various provinces for 1889–90, the Inspector-General of Forests declared that the treatment of these settlements as purely judicial proceedings was, in his opinion, unquestionably the intention and correct interpretation of the forest law, and was productive of the most stable and satisfactory results. In this view the Government concurs, and is glad to learn that the Inspector-General considers the Madras Forest Settlements to be the most perfect of any in India. It must, however, be remembered that the great delay in completing the work entails a heavy charge upon the State, and His Excellency in Council trusts that the arrangements now being made by the Board will render more rapid progress possible in the future. At the suggestion of the Government of India a special report has been called for regarding the causes of this delay. It may at the same time be noted that of the 1,600 square miles remaining unsettled in the Kurnool district at the close of 1889–90, to which areas the Government of India drew special attention in its review of the year's operations, 242 square miles were gazetted as reserved forests during 1890–91, while an additional area of 820 square miles has since been so notified. The development of the policy of meeting the requirements of the agricultural population from reserved forests and of abolishing all other classes of reserves will, however, tend to postpone the termination of the settlement, and it has been declared that the work will probably occupy at least three years more. The sanction of the Secretary of State has been requested for the retention of the special establishments until March 31, 1893, when a more reliable estimate of the areas remaining for

settlement will be furnished, and the Government of India, in strongly supporting this request, has intimated its unqualified approval of the course adopted by this Government.

9. *Demarcation.*—Detailed figures of the demarcation completed during the year are given for the Northern Circle only, and the Southern Circle Conservator explains his failure to comply with the instructions contained in the last year's review by stating that the particulars received from District Forest-officers are incomplete and inaccurate. It is to be regretted that proper steps were not taken to obtain the required information, and the Government trusts that full details will be furnished in future years. It is observed that the Board has under consideration proposals for prescribing a uniform set of rules to guide District Forest-officers in the methods of demarcation to be adopted. The average cost per running mile, according to the figures given in paragraph 5 of the Board's Proceedings, was less than in the previous year in the Northern Circle, and greater in the Southern Circle. In the former circle, however, the rate (Rs. 9–9–0) is calculated on the permanent demarcation only, while in the Southern Circle the cost represents the whole expenditure on demarcation during the year, and the figures of outturn (wrongly shown in the Board's Proceedings as 1,531 instead of 1,631) on which the average rate has been struck, are presumably those for all kinds of work, viz., preliminary and permanent demarcation, reclearing old lines, fencing or ditching, and erecting boundary marks. The comparison is not therefore a fair one. Taking the full amount of demarcation of all sorts done in each circle during the year and calculating on the figures of cost shown in the audited accounts, the average rate for the Presidency comes to a little more than Rs. 11 per running mile. This can doubtless, under systematic management, be reduced, and the charges for reclearing old lines and revising the original demarcation should certainly be curtailed. It was unnecessary for the Northern Circle Conservator to reproduce in his remarks against each district the figures already given in abstract G of his report. Repetition of this sort should be avoided. The areas of forests demarcated in the Northern Circle shown in abstract F differ very materially from those recorded in G.O., No. 806, dated 15th October 1890, and it is feared that in neither case can these statistics be regarded as reliable. The cause of this variation should have been reported.

10. *Surveys.*—The Government is glad to observe that the outturn obtained by the Government of India Survey Party during the survey year 1890–91 showed a considerable increase on the figures of previous seasons, while the average rate was materially reduced. In calculating the average cost per square mile in last year's review, account was not taken of the advance work done in the shape of triangulation and traversing, and Colonel McCullagh explains in his report read in G.O., No. 852, dated 9th September 1891, which is printed at the head of the present Proceedings, that the actual rates were Rs. 162 and Rs. 148 for the years 1888–89 and 1889–90, respectively. The rate has now been reduced to Rs. 111 per square mile, but is still in excess of the average charge (Rs. 80) incurred on similar work in the Bengal Presidency. The Government trusts that the arrangements made by the Board in consultation with the Survey officers for facilitating the work of Colonel McCullagh's party will tend to reduce its cost. The Government of India has recently agreed to bear one-third of the charges for all work completed after the commencement of the current financial year.

11. The expenditure on departmental surveys during the last two years is shown in the margin. The Conservator, Southern Circle, has again wrongly included in the figure for his circle a sum of Rs. 6,171 spent upon line clearing. It was ordered in last year's review that items of this nature should be shown under "demarcation;" and the Government desires that these instructions should be duly complied with in future. It is presumed that the above charges were chiefly incurred in the preparation of plans for Forest Settlement purposes. The remarks of the Conservator, Northern Circle, on this subject have not been noticed by the Board. Mr. Hooper considers that the cost of settlement is needlessly enhanced by these preliminary surveys, as the boundaries originally proposed are frequently deviated from at the

	1889-90.	1890-91.
	RS.	RS.
Northern Circle	3,743	4,782
Southern „	6,083	10,249
Total ...	9,826	15,031

time of settlement. The charges on this account should be kept as low as possible, but the Government does not consider that they can be altogether avoided. It is a matter of great importance that the Forest Settlement-officer, when perambulating the proposed reserve, should be in possession of an outline survey plan showing the boundaries as demarcated or naturally defined, and the Board has recently made arrangements, in conjunction with the Superintendent of Revenue Survey, for the preparation of these maps. The Revenue Survey Department is employed on the final survey of forest areas in Bellary and Anantapur, and orders have been issued directing the Superintendent to complete the work in these districts.

12. *Working plans.*—But little progress appears to have been made during the year in the preparation of working plans, or in the scientific management of the forests on plans already formed. As explained in the reports of last year, the weakness of the district establishments accounts for this defect, and the increase lately sanctioned to the superior staff, as well as that proposed for the subordinate staff, will in time doubtless effect the necessary remedy.

13. *Fire protection.*—The subjoined statement shows the areas protected and the rate per square mile during the last six years:—

	Areas attempted to be protected (in square miles).					
	1885–86.	1886–87.	1887–88.	1888–89.	1889–90.	1890–91.
Northern Circle	728	1,168	1,320	1,667	2,700	2,883
Southern ,, ...	906	1,081	1,250	1,502	1,910	2,045
Total ..	1,634	2,249	2,570	3,169	4,610	4,928

	Rate per square mile (in rupees).					
	1885–86.	1886–87.	1887–88.	1888–89.	1889–90.	1890–91.
Northern Circle	9·10	10·16	10·95	8·53	6·13	7·17
Southern ,, ...	12·67	15·54	16·57	13·53	10·57	11·01
Total ..	11·08	12·75	13·70	10·81	7·97	8·41

The increase in the rates of the Southern Circle is said to be due to the exceptional drought experienced during the year, and the corresponding rise in the Northern Circle is probably due to the same cause. It is to be regretted that it was not found possible to extend the area of special protection in Salem and North Coimbatore as suggested in last year's review. The Government fully agrees with the Board's remarks regarding the separation of the charges incurred on special protection from those connected with unburnt but unprotected blocks. In the Southern Circle details of fire-traced areas are given, but the expenditure thereon is not separately shown. The subject should be dealt with, as the Board suggests, in connection with the question of prescribing forms for the apportionment to each working circle of its share of the capital expenditure incurred on forest organization. The Board has recently issued instructions, which have been approved by Government, for the allotment to their proper heads of all charges incurred on survey, demarcation and protection, but has pointed out that the settlement charges cannot be so apportioned, on account of the extensive areas dealt with by each Forest Settlement-officer. The *number of cases of incendiarism brought into court was again larger in the Southern Circle than in the Northern, though the percentage of protection was better in the former circle.

	1889–90.	1890–91.
* Northern Circle	16	14
Southern ,, ...	34	37
Total ...	50	51

14. *Forest offences.*—In recent years the constant complaint has been that protection was inadequate owing to the insufficiency of the subordinate staff. Proposals for a considerable increase to these establishments have now been submitted for the approval of the Government of India, and as the Board points out, this cause of

complaint should shortly be removed. The Government notices with regret that the remarks made in last year's review regarding the method of calculating percentages of acquittals and of cases compounded have been overlooked. The instructions on this head have indeed been observed by the Conservator, Southern Circle, but in the Northern Circle acquittals are again wrongly compared with the total number of cases disposed of, instead of with the cases actually taken into court. The Board also has overlooked the above orders. The following table gives the figures for the last two years:—

—	Cases pending.	New cases.	Cases disposed of.	Cases taken into court.	Cases compounded.	Percentage of cases compounded to cases disposed of.	Percentage of acquittals to total number of cases taken into court.
Northern Circle .. 1889-90 ..	281	1,355	1,478	967	511	35	30
1890-91 ..	**145**	**1,905**	**1,644**	**1,103**	**541**	**33**	**24**
Southern Circle .. 1889-90 ..	207	2,679	2,568	1,381	1,137	46	28
1890-91 ..	**318**	**3,672**	**3,348**	**1,836**	**1,512**	**45**	**19**
Total .. 1889-90 ..	488	4,034	4,046	2,348	1,698	42	29
1890-91 ..	**463**	**5,577**	**4,992**	**2,939**	**2,053**	**41**	**21**

The above figures show that more cases of offences against the forest laws were brought to light than in the previous year. The increase appears, however, to be due to better protection and the Government notices with pleasure the testimony borne by the Collector of North Arcot to the good work done in this respect by his District Forest-officer, Mr. Marshall. The decrease in the percentages of acquittals is satisfactory. In regard to the compounding of offences, the Government agrees with the Board that this procedure must not be allowed to encourage the commission of offences, but in cases where the evidence is hardly strong enough to secure a conviction, it is better to compound than to run the risk of an acquittal. This view of the matter was put forward by the Board in reviewing the reports of 1887–88 and should be carefully borne in mind by District officers.

15. *Grazing.*—There was again an increase in the receipts from grazing and the sale of fodder grass, the total revenue from this source being Rs. 1,50,015 as compared with Rs. 1,43,845 in the previous year. It is unsatisfactory that full information is not given regarding the area available for free grazing and that closed to grazing in each district. Conservators were called upon, so far back as March 1890, to collect statistics on this head, and should have taken steps to obtain the necessary information from District Forest-officers. The progress made in grass-cutting and hay-making has not been reported. The number of cattle grazed is only given for the Southern Circle. The Government regrets to observe that the statistics of grazing generally are so imperfect, and trusts that due care will be taken in future to submit full information. The results of the experiments ordered to be made to test the efficacy of the various methods of dealing with fodder reserves and pasture grounds will be awaited with interest. The development of the growth of good grasses and their systematic cultivation in the forests is a matter of the very highest importance, and the Government is inclined to agree with the Conservator, Southern Circle, in thinking that it is not always advisable to throw open the reserves to free grazing in seasons of drought. It is not incumbent upon Government to provide pasturage for an unlimited number of cattle. The agricultural cattle are recognised as possessing the first claim to consideration, and for them the reserves must if necessary be fully utilized; but a large number of the remaining animals are useless for any purpose except for manure, and a curtailment of their numbers by judicious restrictions upon grazing is perhaps not subject for regret.

16. *Reproduction.*—His Excellency in Council has perused with much interest the remarks of the Conservators on this subject and the Board's review thereof. It is most satisfactory that experience proves natural growth in this country to be good provided that protection is efficient, and as the Board points out, it is a problem of the greatest importance to secure the latter, while at the same time affording the neighbouring

population with the requisite supplies of fuel and fodder from the forests. The Government observes that instructions have been issued to Forest-officers to record observations regarding the habits and wants of important species of trees as suggested by the Government of India in its review of last year's reports.

The following table compares the statistics of plantations and cultural operations for the last two years :—

		Area in acres.		Cost in rupees during the year.	
		On 1st April 1890.	On 31st March 1891.	1889–90.	1890–91.
Northern Circle	Plantations	7,520	7,589	13,979	10,700
	Topes	6,855	6,898	2,125	2,380
	Cultural operations	1,171	1,965	2,941	4,686
	Total ..	15,546	16,552	19,045	17,766
Southern Circle	Plantations	12,044	12,170	25,613	29,108
	Topes	18,888	18,891	4,741	7,586
	Cultural operations	4,203	4,378	2,302	2,148
	Total ..	35,135	35,439	32,656	38,842
	Grand Total ..	50,681	51,991	51,701	56,608

The variations are not large, with the exception of the increased outlay in the Southern Circle, which is said to be due to extensive replanting operations and to the cost of fencing with wire a reserve in the Madura district. The results of the experiment which is to be repeated during the current year, of planting the *Acacia planifrons* with agricultural crops, will be awaited with interest. The Government notices with regret that Conservators have again failed to pay proper attention in their reports to the important subject of improvement fellings, and the Board's remarks in paragraph 12 of its review should be carefully borne in mind. The details of experiments with exotics given in appendix C to the Southern Circle report are full and interesting : in the Northern Circle the subject does not appear to have received so much attention. The Government agrees with the Board's remarks regarding the experiments with the date palm.

17. *Communications and buildings.*—The desirability of a judicious annual outlay on roads and buildings with a view to the proper development of the forests was recognised by the Government of India in its review of last year's operations. The expenditure under this head for the last two years is shown below. It is satisfactory that the allotment in the Southern Circle was almost wholly utilized :—

	Northern Circle.		Southern Circle.		Total.	
	1889–90.	1890–91.	1889–90.	1890–91.	1889–90.	1890–91.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Roads	9,752	9,020	17,839	21,390	27,591	30,410
Buildings	13,422	15,447	17,652	22,301	31,074	37,748
Other works	826	548	446	234	1,272	782
Total ..	24,000	25,015	35,937	43,925	59,937	68,940

The total expenditure exceeded that of the previous year, but its percentage to the gross revenue (3·8) was exactly the same. As remarked by the Inspector-General of Forests in his annual review of last year, it is false economy to stint money on opening out the forests, when once the rights which burden them have been finally settled, and the Government does not consider that the present outlay is sufficient for the purpose in question. The time of District Forest-officers is, however, doubtless greatly taken up by the work of settlement and selection, and will be for some time to come.

18. *Tramways.*—The Conservators have this year furnished fuller particulars in regard to the working of the forest tramways, and the figures given prove the superiority of this form of transport over the ordinary country carts in workings of any size.

The other advantages of the former system are detailed in paragraph 15 of the Board's Proceedings. The average cost per ton per mile varies from 10 annas 7 pies in Nellore to 3 annas 3 pies in North Arcot. The average in South Coimbatore is given in cubic feet and cannot, therefore, be compared with the rates obtaining on the other tramways.

19. *Yield and working.*—The following statement gives the particulars of the yield of the forests during the last three years :—

		1888-89.	1889-90.	1890-91.
Northern Circle.	Timber and fuel	C. FT. 8,935,990	C. FT. 6,996,159	C. FT. 7,567,152
	Bamboos and minor produce ..	RS. 1,53,565	RS. 2,63,775	RS. 3,24,004
Southern Circle.	Timber and fuel	C. FT. 9,732,988	C. FT. 9,760,821	C. FT. 8,403,560
	Bamboos and minor produce ..	RS. 3,77,073	RS. 3,97,425	RS. 4,93,081

There was a noticeable increase in the outturn under nearly all heads in the Northern Circle, and especially in the number of bamboos removed by private agency. This is mainly due to the inclusion in the returns of bamboos cut in the Rampa forests. The increase of revenue under this head is naturally ascribed to the same cause, but the Board is wrong in stating that the Rampa forests were brought under the control of the department during the year. Trial stations have been established *outside* Rampa, where produce is stopped and seigniorage is levied, but the Forest Act has not as yet been applied to this locality and the department has no authority therein. The decrease in the outturn of timber and fuel in the Southern Circle is fully explained in the Conservator's report. The Government agrees with the Board in considering that the low price obtained for the lower class timbers and for fuel is a matter requiring further investigation on the lines suggested by the Government of India, and desires to receive a separate report on this subject. One of the main objects of the Forest Department should be to provide the public with fuel and timber at low rates, but as the Board points out, the figures quoted in the reports merely represent the seigniorage rates and not the actual market prices.

20. The subjoined statement compares the figures of departmental work with that done by private agency during the last three years :—

Year.	Northern Circle.		Southern Circle.	
	Government agency.	Private agency.	Government agency.	Private agency.
Timber and fuel.	C. FT.	C. FT.	C. FT.	C. FT.
1888-89	1,128,901	7,691,793	677,912	9,046,612
1889-90	972,388	6,007,091	1,049,847	8,703,651
1890-91	1,395,242	6,141,864	1,054,181	7,338,351
Bamboos and minor produce.	RS.	RS.	RS.	RS.
1888-89	17,008	1,71,337	67,126	2,89,036
1889-90	15,311	1,83,436	32,068	2,96,965
1890-91	10,470	3,12,871	55,026	4,37,603

In reviewing last year's report, the Government of India enquired whether account had been taken of the cost of permanent establishments in comparing the average profits of departmental with private working. The Board has now calculated the proportion of B. expenditure that can be assigned to each head, and shows that as regards timber, fuel and bamboos, the work done by Government agency is the more profitable in the Southern Circle, but not in the Northern. The gross charges for establishment cannot be divided among the various heads in proportion to the actual expenditure under A. (Conservancy and Works), nor can the proportion of receipts under each head be adopted, and the Board takes the aggregate of these two accounts as the basis of the calculation. This arrangement throws the major portion of the B. expenditure upon private working and cannot therefore be considered satisfactory. The Board justifies this by the assertion that the large establishments of guards,

watchers and tannadars have to be entertained mainly to meet the requirements of the private agency system and are not so necessary for work done by the department. The charges under this head amount to only 27 per cent. of the total B. expenditure and it can hardly be maintained that the major portion of the remainder is debitable to private working. It is probable that the increase of receipts from the latter source involves more careful and extensive supervision, and on this ground the revenue under each head is rightly taken into the calculation, but it does not follow that the supervision charges for private working are heavier than those for departmental operations, because the gross revenue from the former exceeds that derived from the latter. No satisfactory apportionment of these establishment charges can indeed be made, and in asserting last year that departmental work was more profitable than that done by private agency, the Board did not consider this point. Assuming, however, that the B. expenditure can be allotted in equal proportions to the two systems, and calculating the charges for each head in the same proportion as those shown under A, the following results are obtained :—

Items.	Southern Circle.						
	Quantity sold (form 71).	Amount of sale-proceeds (form 71).	Charges.			Net profit.	Rate of net profit (column 7÷column 2).
			A. (form 64).	B.	Total.		
1	2	3	4	5	6	7	8
Departmental working.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.
Timber and fuel .. C. ft.	1,002,268	1,88,405	68,438	1,17,520	1,85,958	2,447	0 0 0·46
Bamboos .. .. No.	40,429	3,069	985	1,691	2,676	393	0 0 1·86
Sandalwood .. .. C. ft.	2,699	19,040	1,082	1,858	2,940	16,100	5 15 5
							Net rate of loss.
Minor produce .. Mds.	22,749	54,362	28,760	49,386	78,146	— 23,784	1 0 8
Private working.							
Timber and fuel .. C. ft.	7,314,045	3,26,331	19,285	72,854	92,139	2,34,192	0 0 7·1
Bamboos .. .. No.	6,044,381	93,010	5,535	20,910	26,445	66,565	0 0 2·1
Grazing	Not reported.	69,123	4,064	15,353	19,417	49,706	..
Minor produce	Do.	2,73,245	16,063	60,682	76,745	1,96,500	..

Items.	Northern Circle.						
	Quantity sold.	Amount of sale-proceeds.	Charges.			Net profit.	Rate of net profit (column 14÷column 9).
			A.	B	Total.		
	9	10	11	12	13	14	15
Departmental working.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.
Timber and fuel .. C. ft.	1,344,814	1,29,209	75,667	11,170	86,837	42,372	0 0 6·05
Bamboos .. .. No.	86,545	1,803	650	959	1,609	194	0 0 0·4
Sandalwood .. .. C. ft.	1,214	11,229	1,574	2,324	3,898	7,331	6 0 7·4
							Net rate of loss.
Minor produce .. Mds.	17,106	9,756	5,833	8,611	14,444	— 4,688	0 4 4
Private working.							
Timber and fuel .. C. ft.	6,110,534	2,41,988	14,106	53,004	67,110	1,74,878	0 0 5·5
Bamboos .. .. No.	11,935,284	72,924	4,253	15,981	20,234	52,690	0 0 0·8
Grazing	Not reported.	82,775	4,738	17,803	22,541	60,234	..
Minor produce	Do.	1,69,228	9,794	36,801	46,595	1,22,633	..

These figures show higher profits under private working under almost all heads. The calculation cannot, however, be considered as of much value, for the equal division of B. expenditure between the two systems of working is purely arbitrary, and the said outlay cannot, moreover, be debited in full to the head of "Working charges." The development of the forests with a view to obtaining a maximum revenue therefrom at a minimum cost to the State is one of the main duties of the department, but the conservation of forest areas for climatic purposes is an equally important duty

and necessitates the employment of large establishments. This fact must be considered in apportioning the expenditure under head B, and its allotment in full to working charges unduly reduces the net profits of these operations.

21. *Financial results.*—The financial results of the year's working are compared below with those of the previous year :—

	Northern Circle.		Southern Circle.		Total.	
	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	6,06,610	7,45,547	9,51,017	10,49,861	15,57,627	17,95,408
Charges	4,58,330	4,91,555	7,07,028	7,61,729	11,65,358	12,53,284
Surplus ..	1,48,280	2,53,992	2,43,989	2,88,132	3,92,269	5,42,124
Increase over last year ..	1,05,712		44,143		1,49,855	

As the Board points out, the revenue realized during the year under review was the highest on record. The increase in the receipts is very satisfactory, and with the stronger establishments, which are in future to be entertained, it may confidently be anticipated that the revenue will continue to rise. The heavy financial burden that the revised staff will throw upon the State can indeed only be justified by an enhancement of revenue, and if the forests are to be worked, as the Government of India desires; upon mercantile principles, it is incumbent upon the department to show a larger surplus in proportion to the increased outlay. A portion of the present increase appears, however, to be the result of a book transfer of certain items from Land Revenue to Forests. The rise in the receipts for minor produce in Chingleput, Salem and Trichinopoly is said to be due to this cause and the Government notes that the Board promises to report separately upon this question, in so far as it relates to the Salem district. Further information has already been called for in regard to a similar proposal for transfer in Tanjore, and the Government desires to receive a full report on the question generally as affecting the whole Presidency. The sudden rise of receipts for minor produce in North Arcot from Rs. 24,639 to Rs. 52,060 is ascribed to a better system of sale introduced by the District Forest-officer.

22. In conclusion, His Excellency the Governor in Council desires to express his entire concurrence with the remarks contained in paragraph 18 of the Board's review. The reports of the year 1890–91 give evidence of steady progress on the part of the Forest Department, and the operations of the year must on the whole be considered as satisfactory. The increase of revenue proves that the forests are being worked more efficiently, but His Excellency in Council looks rather to the improvement and cheapening of the timber and fuel supply, than to the enhancement of the annual surplus, and trusts that the district schemes for meeting the requirements of the agricultural population from the Government reserves, in accordance with the policy enunciated in G.O., No. 844, dated 29th October 1890, will be drawn up and submitted for approval with the least possible delay.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

To the Commissioners of Land Revenue.

Copy to the Commissioner of Revenue Settlement, Land Records and Agriculture.
,, to the Accountant-General.

No. 1187A.

Copy to the Government of India, Revenue and Agricultural Department.

(Signed) C. A. GALTON,
Secretary to Government.

ANNUAL

ADMINISTRATION REPORT

OF

THE FOREST DEPARTMENT

MADRAS PRESIDENCY,

FOR THE

OFFICIAL YEAR

1891-92.

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS

1892.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE MADRAS PRESIDENCY

FOR THE YEAR 1891-92.

CHAPTER I.

INTRODUCTORY.

Reorganization of the Department.—The main event of the year was the reorganization of the superior staff of the Forest Department sanctioned by the Secretary of State in accordance with the recommendations of the Public Service Commission which was brought into force in this Presidency from the 21st October 1891. Under this scheme, the superior staff is divided into two sections, viz., the upper and the lower controlling staff. The former is again subdivided into two branches, viz., Imperial and Provincial.

2. The Imperial branch includes officers appointed under covenant with the Secretary of State, and those untrained officers who have been appointed to posts of and above the rank of Assistant Conservators in past years, while the Provincial is to include officers who hold the Higher Standard Certificate in Forestry of the Dehra Dún Forest School and who have done good service of not less than five years as Extra Assistant Conservators of Forests.

For the Imperial branch the pay varies from Rs. 1,100 to Rs. 1,600 for Conservators and from Rs. 550 to Rs. 900 for Deputy Conservators, and from Rs. 350 to Rs. 450 for Assistant Conservators.

The pay of the Provincial branch of the upper Controlling Service which includes only Extra Deputy Conservators has been fixed at nearly two-thirds of the pay of Deputy Conservators of the Imperial branch and varies from Rs. 450 to Rs. 600. No such officers have, however, yet been appointed for this Presidency.

3. The lower controlling staff, which consists of Extra Assistant Conservators, is intended for the charge of minor divisions and the pay of these officers ranges from Rs. 200 to Rs. 350. This class displaces the former Sub-Assistant Conservators.

4. The strength of the "Imperial" staff of officers has been increased under the new scale by the addition of one Conservator and seven Deputy Conservators.

5. The revision of the subordinate establishment proposed in Board's Proceedings, dated 13th May 1891, No. 201, has been sanctioned during the year by the Local Government and is now under correspondence with the Government of India. According to these proposals the number of Forest Rangers will be doubled, while the number of Foresters and Guards are to be increased by 60 per cent. and 38 per cent.,

respectively. These increases will, however, owing to the present lack of qualified candidates, be only gradually worked up to and the subordinate establishments must therefore, for some time to come, continue inadequate. The pay of 1st-grade Rangers will be increased under the Board's proposals from Rs. 125 to Rs. 150, that of other grades varying from Rs. 50 to Rs. 125.

6. *Circle charges.*—Until the 7th November 1891, the Presidency was divided into two Forest Circles as shown below, the head-quarters of both Conservators being at Madras:—

Northern Circle.	*Southern Circle.*
1. Ganjam.	1. North Arcot.
2. Vizagapatam.	2. South do.
3. Godávari.	3. Tanjore.
4. Kistna.	4. Trichinopoly.
5. Nellore.	5. Madura.
6. Cuddapah.	6. Tinnevelly.
7. Anantapur.	7. North Coimbatore.
8. Bellary.	8. South do.
9. Kurnool.	9. Nílgiris.
10. Chingleput.	10. Salem.
	11. North Malabar.
	12. South do.
	13. South Canara.

Up to the end of the year 1890–91, Chingleput had belonged to the Southern Circle and the Nílgiris to the Northern. On the 1st April 1891, an exchange of the two districts was made.

7. In November 1891, in pursuance of the reorganization above referred to, a third Circle was formed comprising eight districts, three of which formerly belonged to the Northern and five to the Southern Circle. The districts comprised in each of the present Circles are shown below:—

Northern Circle.	*Central Circle.*	*Southern Circle.*
Head-quarters, Waltair—	Head-quarters, Madras—	Head-quarters, Coimbatore—
1. Ganjam.	1. Nellore.	1. Madura.
2. Vizagapatam.	2. Cuddapah.	2. Tinnevelly.
3. Godávari.	3. Chingleput.	3. North Coimbatore.
4. Kistna.	4. North Arcot.	4. South do.
5. Anantapur.	5. South do.	5. Nílgiris.
6. Bellary.	6. Tanjore.	6. North Malabar.
7. Kurnool.	7. Trichinopoly.	7. South do.
	8. Salem.	8. South Canara.

8. Mr. J. W. Cherry was in charge of the Northern Circle from the beginning of the year under report up to the 6th of July, and Mr. E. D. M. Hooper during the remainder of the year.

Colonel Campbell Walker held charge of the Southern Circle up to 6th July 1891 and was then succeeded by Mr. J. W. Cherry who was in charge for the rest of the year.

Mr. E. P. Popert was Conservator of the Central Circle from the date of its constitution.

9. *Inspections by Conservators.*—Mr. Hooper visited the Ganjam, Vizagapatam, Godávari, Kistna, Bellary and Anantapur districts, though he did not make any complete inspection of the forests in any one district. He also visited the Cuddapah district before it was transferred to the new Central Circle. In Ganjam, he attended, among other matters, to the inspection of the Agency tracts and to the irregularities in the settlement of certain reserves in the Goomsur taluk. His inspection of the Vizagapatam district was not completed within the year under report. In Bellary, he visited the Sandúr leased forests under the special orders of Government and submitted a report which he has since been requested to supplement by the submission of practical proposals for developing the revenue of these forests. In Cuddapah and

Kistna, his inspections were confined to the Balapalle and Bezváda reserves respectively. In Godávari and Anantapur, the Conservator simply conferred with the Collectors and their District Forest-officers regarding forest matters. Mr. Hooper also inspected the District Forest-offices in Bellary, Anantapur, Ganjam and Vizagapatam.

Mr. Popert, who joined this Presidency in November 1891, was not able to do much work in the way of inspection. The only district visited by him within the year was Chingleput. He proceeded in March 1892 to Dehra Dún to attend the Board of Control of the Forest School there.

Mr. Cherry visited the forests of the Nílgiris, Madura, Tinnevelly and North Malabar, and reports were submitted by him to the Board on the last three districts. The Board considers that this Conservator's touring was not sufficient, even making allowance for the fact that the redistribution of the Circles late in the year and the removal of his head-quarters to Coimbatore interfered to a certain extent with inspection work.

10. *Touring of District Forest-officers.*—The subjoined table shows the time spent in camp by the several District Forest-officers :—

Districts.	Name of officer in charge.	Number of days in charge.	Number of days spent in camp.	Percentage of time spent in camp	Remarks.
1	2	3	4	5	6
Ganjam	Mr. J. S. Battie	366	249	68	
Vizagapatam	,, McArthy	366	120	33	
	,, E. D. M. Hooper	34	7	21	
	,, Subbarayudu, Deputy Collector	46	..	..	
Godávari	,, E. D. M. Hooper	15	..	..	
	,, Subbarayudu, Deputy Collector.	107	..	..	
	,, H. H. Ward	164	98	60	
	,, V. Alwar Chetty	336	251	75	
Kistna	,, V. Venugopaul Chetty (Assistant Collector).	30	..	..	During Mr. Alwar Chetty's absence on privilege leave.
	,, T. M. Nallasawmy Naidu ..	190	78	41	Was transferred to Bellary.
Anantapur	,, Ananta Ayer, Deputy Collector.	1	..	..	
	,, T. G. A. Gaudoin	30	19	63	
	,, A. B. Jackson	145	76	52	
	,, A. B Jackson	218	126	58	
Bellary	,, C. E. Plunkett (Dy. Collector).	8	..	..	
	,, T. M. Nallasawmy Naidu ..	140	98	70	
Kurnool	,, P. M. Lushington	366	214	58	
Nellore	,, J. H. B. Brougham	366	171	47	
	,, F. A. Lodge	295	151	51	
Cuddapah	,, Gaudoin	71	56	79	During Mr. Lodge's absence on privilege leave.
Chingleput	,, T. Muhammad Ali Khan ..	366	224	61	
North Arcot	,, J. G. F. Marshall	366	307	84	
	,, A. W. C. Stanbrough ..	324	160	49	
South Arcot	,, C. J. Woutersz	42	14	33	During Mr. Stanbrough's absence on other duty as Examiner.
Tanjore and Trichinopoly.	,, W. C. Hayne	366	43 / 165	57	
Salem	,, W. Carroll	307	173	56	
	,, Brasier	59	46	78	
Madura	,, H. A. Gass	366	252	69	The figure in column 4 excludes 72 days spent at Kodaikánal.
Tinnevelly	,, C. E. Brasier	90	48	53	
North Coimbatore ..	,, C. D. P. Thornton	276	192	70	
South do. ..	,, T. Sheffield	366	305	83	
Nílgiris	,, H. J. A. Porter	305	140	46	
	,, S. C. Moss	61	36	59	
North Malabar	,, R. W. Morgan	366	191	52	
	,, C. Eber Hardie	349	186	53	
	,, Deputy Collector, Wynaad ..	17	..	..	During Mr. Eber Hardie's absence on privilege leave.
South do.	,, G. Hadfield	357	193	54	
	,, W. P. Rego	9	8	89	
South Canara	,, T. P. Peake	366	166	45	
	Total ..	8,052	4,563	57	

From the above it will be seen that the time spent in camp by the District Forest-officers was on the whole satisfactory, the average for the Presidency being over half the total period of charge. Messrs. Marshall and Sheffield, District Forest-officers, North Arcot and North Coimbatore, respectively, deserve special mention in this respect. Mr. McArthy, District Forest-officer of Vizagapatam, showed very poor touring, but it is believed that he was detained at head-quarters by office work in connection with the preparation of maps and notifications for the several blocks selected and settled. Of the Forest-officers who held charge of a district for three months and upwards, the following spent less than half the time in camp :—

	Percentage of time spent on tour.
Mr. Nallasawmy Naidu (Anantapur)	41
„ Brougham (Nellore)	47
„ Stanbrough (South Arcot)	49
„ Porter (South Coimbatore)	46
„ Peake (South Canara)	45

Messrs. Porter, Peake and Stanbrough were kept at head-quarters by ill health. Messrs. Brougham and Nallasawmy Naidu have submitted no explanation. The latter officer, however, it is observed, showed satisfactory touring in Bellary where he was subsequently transferred. In several districts Range offices have not been inspected twice in the year as provided in paragraph 184 of the Forest Code, and in a few cases, some of the Range offices were not inspected at all, the time of District Forest-officers having been mainly taken up in the selection, demarcation and settlement of areas for further reservation. The inspection of Range offices is one of the most important duties of District Forest-officers and must be regularly performed in future, whatever other work may be on hand.

11. Of the 23 Forest districts, ten were in charge of Deputy Conservators, seven in charge of Assistant Conservators, five in charge of Extra Assistant Conservators (Sub-Assistants), and one in charge of a Ranger on the 31st March 1892.

District Forest-officers are very much hampered by want of adequate establishment in the subordinate grades.

CHAPTER II.

Areas and Boundaries.

12. The following statement shows the areas of the several classes of forests at the commencement and at the close of the year :—

ABSTRACT A.—Classes and areas of forests in square miles.

Class of forests.	Area on 1st April 1891.	Added during the year 1891–92.	Excluded during the year 1891–92.	Net increase or decrease.	Area on 31st March 1892.	Source or cause of increase or decrease.
Northern Circle.	SQ. MLS	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	
Reserved forests ..	1,113	1,090	1	+ 1,089	(*a*) 2,202	(*a*) 1,069 square miles transferred or added from reserved lands; 20 square miles added by rectification of areas and 1 square mile by transfer from other district; 1 square mile deducted by transfer to other district.
Reserved lands ..	3,735	247	1,321	— 1,074	(*b*) 2,661	(*b*) *Added* 96 square miles new areas, 22 square miles from "other forests," 129 square miles by rectification of areas. *Deducted* 202 square miles owing to rectification of areas, 50 square miles at settlement, and 1,069 square miles by transfer to reserved forests.
Other forests ..	23	..	22	— 22	(*c*) 1	(*c*) 22 square miles transferred to reserved lands.
Total ..	4,871	1,337	1,344	— 7	4,864	
Central Circle.						
Reserved forests ..	2,063	374	7	+ 367	(*d*) 2,430	(*d*) 362 square miles transferred or added from reserved lands; 12 square miles added and 7 square miles deducted owing to rectification of area.
Reserved lands ..	4,010	89	446	— 357	(*e*) 3,653	(*e*) *Added* 33 square miles new areas, 47 square miles from "other forests," and 9 square miles by rectification of areas; *deducted* 69 square miles owing to rectification in areas, 15 square miles at settlement and 362 square miles by transfer to reserved forests.
Other forests ..	605	17	47	— 30	(*f*) 575	(*f*) 47 square miles transferred to reserved lands.
Total ..	6,678	480	500	— 20	6,658	
Southern Circle.						
Reserved forests ..	1,936	635	28	+ 607	(*g*) 2,543	(*g*) 631 square miles transferred or added from reserved lands, 4 square miles added and 28 square miles deducted owing to rectification of area.
Reserved lands ..	3,690	51	651	— 600	(*h*) 3,090	(*h*) *Added* 14 square miles "new areas," and 37 square miles by rectification of areas; *deducted* 12 square miles owing to rectification in areas, 8 square miles at settlement and 631 square miles by transfer to reserved forests.
Other forests ..	648	127	47	+ 80	(*i*) 728	(*i*) 127 square miles added by revised estimate of area and 47 square miles excluded as the areas were not suitable for reservation.
Total ..	6,274	813	726	+ 87	6,361	
Total.						
Reserved forests ..	5,112	2,099	36	+ 2,063	7,175	
Reserved lands ..	11,435	387	2,418	— 2,031	9,404	
Other forests ..	1,276	144	116	+ 28	1,304	
Grand Total ..	17,823	2,630	2,570	+ 60	17,883	

The area of reserved forests added during the year was largest in the Northern Circle, chiefly in the Kurnool district where three large blocks * settled in 1887–88 were gazetted in 1891–92. The decrease in the area of reserved lands is mainly the result of the transfer of a corresponding area to reserved forests. The lands classed as "other forests" are not actually under the control of the department; they are mainly lands to be selected for reservation with reference to the order of Government regarding the provision of fuel and fodder for the agricultural population.

* Uyyalavada.
Nandyál.
Nandikótkur.

13. The total area of each district and of the reserved forests and reserved lands therein is shown in the subjoined table :—

Abstract B.—District areas and forest reserves in square miles.

Districts.	Total district area excluding feudatory and tributary states.	Area excluding zemindaris and whole inam villages.	Cultivated area.	Particulars of remaining area in column 3.			Forests under the control of the Forest Department.					Percentage of column 10 to column 3.	Percentage of column 10 to column 7.	Percentage of column 12 to column 3.	Percentage of column 12 to column 7.
				Uncultivated and forest areas.	Area for which returns are not available.	Total of columns 5 and 6.	Reserved forests under Act V of 1882.	Reserved lands.	Total of reserves, columns 8 and 9.	Unclassed or other forests.	Total of columns 10 and 11.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.				
Ganjam	8,369	1,797	572	871	354	1,225	114	437	551	..	551	30·6	44·9	30·6	44·9
Vizagapatam ..	16,992	1,854	214	193	1,447	1,640	14	82	96	1	97	5·2	5·9	5·2	5·9
Godâvari	7,864	3,823	1,506	1,850	467	2,317	418	598	1,016	..	1,016	26·6	43·8	26·6	43·8
Kistna	8,397	5,414	3,072	2,342	..	2,342	452	216	668	..	668	12·3	28·5	12·3	28·5
Anantapur ..	5,274	4,311	1,623	2,286	402	2,688	31	323	354	..	354	8·2	13·2	8·2	13·2
Bellary	5,972	4,698	2,441	2,257	..	2,257	105	309	414	..	414	8·8	18·3	8·8	18·3
Kurnool	7,514	5,925	1,852	4,073	..	4,073	1,068	696	1,764	..	1,764	29·8	43·3	29·8	43·3
Total ..	60,382	27,822	11,280	13,872	2,670	16,542	2,202	2,661	4,863	1	4,864	17·5	29·4	17·5	29·4
Central Circle.															
Nellore	8,765	4,043	1,531	2,498	14	2,512	263	328	591	..	591	14·6	23·5	14·6	23·5
Cuddapah	8,729	7,493	1,959	5,534	..	5,534	414	1,610	2,024	13	2,037	27·0	36·8	27·2	36·8
Chingleput ..	2,841	2,051	970	1,081	..	1,081	146	49	195	28	223	9·5	18·0	10·9	20·6
North Arcot ..	7,496	3,768	1,279	2,489	..	2,489	513	399	912	..	912	24·2	36·6	24·2	36·6
South do. ..	5,140	4,853	2,240	2,613	..	2,613	164	637	801	258	1,059	16·5	30·7	21·8	40·5
Tanjore	3,741	2,486	1,691	795	..	795	9	16	25	41	66	1·0	3·1	2·7	8·3
Trichinopoly ..	3,631	2,684	1,643	1,041	..	1,041	159	87	246	42	288	9·2	23·6	10·7	27·6
Salem	7,471	5,329	1,963	3,366	..	3,366	762	527	1,289	193	1,482	24·2	38·3	27·8	44·0
Total ..	47,814	32,707	13,276	19,417	14	19,431	2,430	3,653	6,083	575	6,658	18·6	31·3	20·3	34·2
Southern Circle.															
Madura	8,800	3,190	1,608	1,162	420	1,582	467	31	498	374	872	15·6	31·5	27·3	55·1
Tinnevelly	5,387	3,607	2,251	1,356	..	1,356	567	22	589	17	606	16·3	43·4	16·8	44·7
Coimbatore ..	7,860	7,149	3,724	3,256	169	3,425	1,051	1,484	2,535	2	2,537	35·5	74·0	35·5	74·0
Nilgiris	957	957	324	633	..	633	207	178	385	..	385	40·2	60·8	40·2	60·8
Malabar	5,589	5,565	1,497	4,068	..	4,068	158	444	602	335	937	10·8	14·8	16·8	23·0
South Canara ..	3,902	3,883	633	3,250	..	3,250	93	931	1,024	..	1,024	28·9	31·5	28·9	31·5
Total ..	32,495	24,351	10,037	13,725	589	14,314	2,543	3,090	5,633	728	6,361	23·1	39·4	26·1	44·4
Grand Total ..	140,691	84,880	34,593	47,014	3,273	50,287	7,175	9,404	16,579	1,304	17,883	19·5	32·9	21·0	35·5

Column 14 of the above statement compares the total area of reserved forests and reserved lands with the total area of land at the disposal of Government in each district. The proportion varies from 74 per cent. in Coimbatore and 60·8 per cent. in the Nílgiris, to 3·1 per cent. in Tanjore where there are no forests worthy of the name and 5·9 per cent. in Vizagapatam. The average percentage is largest in the Southern Circle in most of the districts, of which the work of reservation (*i.e.*, of selection and settlement) is practically complete. Next comes the Central Circle, where large areas still remain to be taken up for reservation in the Trichinopoly, Cuddapah, North Arcot, Salem and South Arcot districts ; and the least advanced in this respect is the Northern Circle. Further remarks on this subject will be found in paragraph 20.

14. *Reserved forests.*—The net additional areas finally constituted reserved forests during the past two years are shown below :—

ABSTRACT C.—Reserved forests in square miles.

Districts.	Prior to 1890–91.	During 1890–91.	During 1891–92.	Total.
1	2	3	4	5
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Ganjam	18	67	29	114
Vizagapatam	14	— 10	10	14
Godávari	103	242	73	418
Kistna	69	277	106	452
Anantapur	14	..	17	31
Bellary	3	74	28	105
Kurnool	..	242	826	1,068
Total	221	902 — 10	1,089	2,202
Central Circle.				
Nellore	54	115	94	263
Cuddapah	351	5	58	414
Chingleput	93	33	20	146
North Arcot	377	53	83	513
South do.	119	29	16	164
Tanjore	9	..	..	9
Trichinopoly	137	4	18	159
Salem	643	41	78	762
Total	1,783	280	367	2,430
Southern Circle.				
Madura	348	31	88	467
Tinnevelly	295	133	139	567
North Coimbatore	119	..	366	485
South do.	566	..	..	566
Nílgiris	199	2	6	207
North Malabar	118	1	..	119
South do.	39	..	..	39
South Canara	50	35	8	93
Total	1,734	202	607	2,543
Grand Total	3,738	1,374	2,063	7,175

The striking increase in Kurnool has already been explained (paragraph 12); that in the North Coimbatore Division, which is next in amount, is due to a similar cause, *i.e.*, the addition of three large blocks settled in previous years, but notified in 1891–92.

15. The statement suggested by the Government of India to show the progress made in forest settlement is given below with the modifications noted in the Madras Government's review of the last Administration report :—

ABSTRACT D.

Circle.	Area of reserved lands and of "other forests" *vide* abstract A above.					Area brought under chapter II of the Madras Forest Act.				
	On 1st April 1891.	Added during 1891-92.	Total.	Excluded during the year (mainly by reason of constitution in reserved forest).	Balance at the end of the year.	Area notified under section 4 on 1st April 1891.	Added during 1891-92.	Total.	Notified under section 16 during 1891-92.	Balance notified under section 4 but not settled.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Northern ..	3,758	247	4,005	1,343	2,662	3,655	17	3,672	1,089	2,583
Central ..	4,615	106	4,721	493	4,228	3,377	100	3,477	367	3,110
Southern ..	4,338	178	4,516	698	3,818	1,996	302	2,298	607	1,691
Total ..	12,711	531	13,242	2,534	10,708	9,028	419	9,447	2,063	7,384

16. The following table shows the area of reserved lands under settlement and the area finally notified in each district during the year as compared with 1890–91 and the balance under settlement at the end of the year:—

ABSTRACT E.—Forest Settlement.

District.	UNDER SETTLEMENT UP TO 1890–91.		ADDED DURING 1890–91.		ADDED DURING 1891–92.		TOTAL UNDER SETTLEMENT.	
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
1	2	3	4	5	6	7	8	9
Northern Circle.		SQ. MILS.		SQ. MILS.		SQ. MILS.		SQ. MILS.
Ganjam	35	529	6	3	3	3	44	535
Vizagapatam	6	24	..	*a*— 10	5	67 *a*+ 15	11	96
Godâvari	76	1,020	1	33 *a*+ 1	..	*b* — 38	77	1,016
Kistna	55	685	10	24 *a*— 22	..	*a*— 18 *b*— 1	65	668
Anantapur	44	276	1	1	..	*a*+ 76 *c*+ 1	45	354
Bellary	62	318	3	2	10	24 *a*+ 9 *c*— 1	75	352
Kurnool	15	1,715	..	*a*+ 169	5	24 *a*—144	20	1,764
Total ..	293	4,567	21	201	23	17	337	4,785
Central Circle.								
Nellore	123	579	..	*a* — 2	..	*a* — 5	123	572
Cuddapah	109	1,838	..	..	..	*a* + 6	109	1,844
Chingleput	79	156	12	5	23	19	114	180
North Arcot	92	858	2	15	5	23 *a*— 5	99	891
South do.	85	413	28	246	..	*b*— 9	113	650
Tanjore	24	19	..	..	..	..	24	19
Trichinopoly	74	197	..	..	19	9 *a*+ 1	93	207
Salem	108	982	18	134	2	62 *b*— 1	128	1,177
Total ..	694	5,042	60	398	49	100	803	5,540
Southern Circle.								
Madura	81	476	..	..	..	*a*+ 26 *a*— 21	81	481
Tinnevelly	39	589	..	..	..	..	39	589
North Coimbatore	10	776	3	502	51	317 *a*— 3 *b*— 8	64	1,584
South do.	10	566	..	..	..	..	10	566
Nilgiris	108	295	18	16	7	1	133	312
North Malabar	13	261	..	..	..	..	13	261
South do.	21	299	..	..	..	*a* + 1	21	300
South Canara	27	152	..	..	..	*a* — 11	27	141
Total ..	309	3,414	21	518	58	302	388	4,234
Grand Total ..	1,296	13,023	102	1,117	130	419	1,528	14,559

(*a*) Rectification of area. (*b*) During settlement. (*c*) Transferred to Anantapur district.

Abstract E—Forest Settlement—*cont.*

Finally notified and constituted reserved forests—*cont.*

District.	Up to 1890-91.		During 1890-91.		During 1891-92.		Total.	
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
	10	11	12	13	14	15	16	17
Northern Circle.		SQ. MS.		SQ. MS.		SQ. MS.		SQ. MS.
Ganjam	3	18	5	67	1	29	9	114
Vizagapatam	1	14	..	* —10	..	* + 10	1	14
Godávari	6	103	28	242	8	73	42	418
Kistna	23	69	21	277	10	106	54	452
Anantapur	5	14	..	..	3	5 † + 1 * + 11	8	31
Bellary	2	3	23	74	10	29 † — 1	35	105
Kurnool	..	..	3	242	7	826	10	1,068
Total ..	40	221	80	902 * —10	39	1,089	159	2,202
Central Circle.								
Nellore	37	54	51	115	17	94	105	263
Cuddapah	19	351	1	5	13	58	33	414
Chingleput	20	93	39	33	13	20	72	146
North Arcot	44	377	6	53	16	83	66	513
South do.	26	119	18	29	12	16	56	164
Tanjore	17	9	..	..	1	·03	18	9
Trichinopoly	33	137	6	4	27	18	66	159
Salem	70	643	8	41	6	78	84	762
Total ..	266	1,783	129	280	105	367	500	2,430
Southern Circle.								
Madura	64	348	9	31	6	109 * —21	79	467
Tinnevelly	21	295	8	133	9	139	38	567
North Coimbatore	6	119	..	..	3	369 * — 3	9	485
South do.	10	566	..	..	..	..	10	566
Nilgiris	51	199	2	2	42	6	95	207
North Malabar	6	118	1	1	..	..	7	119
South do.	6	39	..	..	..	..	6	39
South Canara	14	50	2	35	2	8	18	93
Total ..	178	1,734	22	202	62	607	262	2,543
Grand Total ..	484	3,738	231	1,374	206	2,063	921	7,175

* By revised estimate of area.

† Transferred to Anantapur.

Abstract E—Forest Settlement—*cont.*

Statement of Balance of lands still under settlement.

Districts.	Of lands notified in																Total balance.	
	1884–85.		1885–86.		1886–87.		1887–88.		1888–89.		1889–90.		1890–91.		1891–92.			
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Northern Circle.		SQ. M.		SQ.M		SQ.M		SQ.M		SQ.M		SQ.M		SQ.M		SQ.M		SQ. M.
Ganjam	23	394	3	22	..	..	..	..	..	..	..	..	6	2	3	3	35	421
Vizagapatam	..	..	..	..	..	..	..	..	..	..	5	15	..	..	5	67	10	82
Godávari	..	..	2	182	1	8	2	19	..	..	29	356	1	33	..	..	35	598
Kistna	4	172	..	..	..	..	..	..	..	..	2	21	5	23	..	..	11	216
Anantapur	1	34	..	..	20	182	10	88	5	17	1	2	..	..	..	..	37	323
Bellary	15	111	1	6	..	..	..	..	9	102	2	2	3	2	10	24	40	247
Kurnool	3	650	..	..	..	..	2	22	..	..	..	..	..	..	5	24	10	696
Total ..	46	1,361	6	210	21	190	14	129	14	119	39	396	15	60	23	118	178	2,583
Central Circle.																		
Nellore	7	204	2	42	9	63	..	..	..	..	..	..	..	..	..	..	18	309
Cuddapah	36	986	..	..	40	444	..	..	..	..	..	..	..	..	..	..	76	1,430
Chingleput	..	..	..	..	..	..	1	4	1	1	6	5	11	4	23	20	42	34
North Arcot	..	..	..	..	..	..	18	195	1	20	7	125	2	15	5	23	33	378
South do.	..	..	8	158	3	6	5	7	13	69	..	..	28	246	..	..	57	486
Tanjore	..	..	..	..	1	7	2	3	3	38	..	..	..	..	..	..	6	10
Trichinopoly	..	..	..	..	5	37	..	..	3	1	..	..	..	..	19	10	27	48
Salem	5	47	1	16	..	..	7	33	8	107	3	16	18	134	2	62	44	415
Total ..	48	1,237	11	216	58	557	33	242	29	198	16	146	59	399	49	115	303	3,110
Southern Circle.																		
Madura	..	..	..	..	..	..	1	6	..	..	1	8	..	..	..	..	2	14
Tinnevelly	..	..	..	..	..	..	1	22	..	..	..	..	..	..	..	..	1	22
North Coimbatore ..	..	..	..	..	..	..	1	280	..	..	..	..	3	502	51	317	55	1,099
South do. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nilgiris	..	..	1	64	13	24	..	..	..	..	17	16	..	..	7	1	38	105
North Malabar	3	102	3	40	..	..	..	..	..	..	..	..	..	..	..	..	6	142
South do.	..	..	..	..	..	..	10	19	5	242	..	..	..	..	..	..	15	261
South Canara	..	..	2	35	1	4	..	..	1	2	5	7	..	..	..	..	9	48
Total ..	3	102	6	139	14	28	13	327	6	244	23	31	3	502	58	318	126	1,691
Grand Total ..	97	2,700	23	565	93	775	60	698	49	561	78	573	77	961	130	551	607	7,384

Abstract E—Forest Settlement—*cont.*

Statement of Balance of lands still under settlement—*cont.*

Districts.	Classification of balance under columns 34 and 35.											
	Settled and reported on.								Settled, but not reported on.		Settlement proceeding.	
	Notified under section 16 during 1891–92, but with effect only from 1892–93.		With Board or Government awaiting publication of notification under section 16.		Returned by the Board for revision and remaining either with Collectors, District Forest-officers or Forest Settlement-officers.		Total settled and reported on.					
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
	36	37	38	39	40	41	42	43	44	45	46	47
Northern Circle.		SQ. MS		SQ. MS.		SQ. MS.		SQ. MS.		SQ. MS.		SQ. MS.
Ganjam	..	..	7	66	9	192	16	258	7	135	12	28
Vizagapatam	..	..	..	..	5	15	5	15	..	..	5	67
Godávari	1	10	..	..	1	8	2	18	4	47	29	533
Kistna	2	91	5	92	..	..	7	183	3	14	1	19
Anantapur	1	2	9	42	4	46	14	90	17	165	6	68
Bellary	2	4	10	45	7	76	19	125	9	80	12	42
Kurnool	4	657	..	..	..	..	4	657	1	16	5	23
Total ..	10	764	31	245	26	337	67	1,346	41	457	70	780
Central Circle.												
Nellore	3	12	6	63	..	..	9	75	9	234	..	..
Cuddapah	1	3	24	589	30	620	55	1,212	16	106	5	112
Chingleput	..	..	1	4	..	..	1	4	1	1	40	29
North Arcot	4	28	15	197	1	2	20	227	13	151	..	..
South do.	4	12	27	175	4	17	35	204	15	136	7	146
Tanjore	1	30	2	10	..	..	3	10	..	..	3	38
Trichinopoly	4	16	2	11	..	..	6	27	2	11	19	10
Salem	4	27	17	173	6	52	27	252	13	133	4	30
Total ..	21	98	94	1,222	41	691	156	2,011	69	772	78	327
Southern Circle.												
Madura	1	8	..	..	..	..	1	8	1	6	..	..
Tinnevelly	..	..	1	22	..	..	1	22	..	..	..	..
North Coimbatore ..	..	..	13	190	..	..	13	190	42	909	..	..
South do. ..	..	..	..	..	..	..	..	..	..	..	..	..
Nilgiris	8	2	15	24	1	1	24	27	2	..	12	78
North Malabar	..	..	1	3	..	..	1	3	5	139	..	..
South do.	..	..	..	..	..	..	..	..	11	170	4	91
South Canara	1	4	..	..	2	2	3	6	6	42	..	..
Total ..	10	14	30	239	3	3	43	256	67	1,266	16	169
Grand Total ..	41	876	155	1,706	70	1,031	266	3,612	177	2,495	164	1,276

17. From the foregoing it will be seen that the number of blocks pending final notification at the beginning of the year was 683,* covering an area of 9,028 square miles to which 130 blocks with an area of 419 square miles were added during the year, making a total of 813 blocks and 9,447 square miles. Of these, 206 blocks (area 2,063 square miles) were finally notified during the year, leaving a balance of 607 blocks with an area of 7,384 square miles at its close. The pending blocks were notified for settlement between the years 1884–85 and 1891–92. Of these 607 blocks, 41 were notified under section 16 within the year, but their reservation took effect in 1892–93; 155 blocks were pending scrutiny in the

* (*A*) *Notified under section* 4 *as per abstract E, columns* 2 *to* 5.

	Number of blocks.	Areas. SQ. MLS.
Up to 1890–91	1,296	13,023
During 1890–91	102	1,117
Total ...	1,398	14,140

(*B*) *Notified under section* 16 *as per abstract E, columns* 10 *to* 13.

Up to 1890–91	484	3,738
During 1890–91	231	1,374
Total ...	715	5,112
Balance (A—B)	683	9,028

Board's office, 70 were returned to the Collectors for revision and the remaining 341 blocks were pending with the Forest Settlement-officers in various stages of settlement for causes described in appendix A. The main causes of the delay in the notification of these 341 blocks as well as of the 70 blocks returned for revision were the following :—

(1) Delay in the preparation of maps to accompany the final notifications.

(2) Delay in the decision of appeals against the Forest Settlement-officer's decisions.

(3) Delay in obtaining sanction to grant exchanges of land.

(4) Delay in the District Courts in awarding compensation in cases referred to them.

(5) Delay on the part of District Forest-officers in supplying information regarding boundary description, disbursement of compensation, &c.

In the Godávari, Kistna and Kurnool districts the delay was mainly due to the absence of the Special Forest Settlement-officer for eight months of the year, first on privilege and then on sick leave, and in Chingleput to Mr. Pinto, the local Settlement-officer, having been engaged on famine relief work for nine months and to his having been on leave for the remaining three months.

18. Compared with the preceding year, the number of blocks settled and reported on, but not definitely constituted, shows a considerable decrease, while the number under settlement shows a slight increase, the net result being a decrease of 76 in the number of pending blocks and of 1,644 square miles in their aggregate area—

Year.	Settled and reported on.		Under settlement.		Total.	
	Number.	Area.	Number.	Area.	Number.	Area.
1	2	3	4	5	6	7
		SQ. MLS.		SQ. MLS.		SQ. MLS.
1890–91	386	5,570	297	3,458	683	9,028
1891–92	266	3,613	341	3,771	607	7,384
Difference ..	— 120	— 1,957	+ 44	+ 313	— 76	— 1,644

19. The Board is taking every possible care, by insisting on the submission of weekly and monthly diaries by Forest Settlement-officers, to see that they are kept fully employed and that no avoidable delay occurs in the submission of their reports.

20. *Selections for further reservation.*—Owing to want of time and insufficient establishments, the selection of lands for further reservation with reference to the Order of Government, dated 29th October 1890, No. 844, has not progressed as rapidly as could be desired in most districts. In Vizagapatam, Godávari, Kistna, Anantapur, Kurnool, North Arcot and South Arcot the selection is said to be well advanced, and maps to accompany the submission of notifications under section 4 of the Act are under preparation. In Bellary, Cuddapah, Chingleput, Trichinopoly, Salem, Tinnevelly, North Coimbatore and Nílgiris selection is in progress. In Ganjam proposals cannot be made until the Act is extended to the Agency tracts. In Madura, both selection and notification have been practically completed with the exception of the Upper Palni Plateau, the reservation of which has been taken on hand. In Nellore, the question of taking up, under the Act, the kanchas and shekhadas (free and taxed pasture lands) was decided too late in the year to admit of action being taken before its close (Board's Proceedings, dated 16th January 1892, No. 18, Forest). Though Tanjore is not a district in which much reservation is possible the District Forest-officer has sent up proposals for reserving waste lands in parts of the district and they are under the consideration of the Collector. In South Coimbatore and Malabar there is very little left that is worth reserving. In South

Canara the area to be reserved has already been fixed once for all, and steps are being taken to notify under the Act the areas not already notified.

21. *Work of Special Forest Settlement-officers.*—The work done by the Special Forest Settlement-officers during the year is shown in the following table :—

ABSTRACT F.—Outturn of work by special Forest Settlement-officers during 1891-92.

Name of Special Forest Settlement-officer.	Districts.	Issue of proclamation after notification under section 4.		Settlement of claims.		Report after settlement submitted.		Final notification proclaimed.		Cost.
		Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	
1	2	3	4	5	6	7	8	9	10	11
			SQ. MLS.		SQ. MLS.		SQ. ML.		SQ. MLS.	RS.
M.R.Ry. D. Jagannadha Row.	Godávari	..	..	18	237	1	16	7	108	9,778
	Kistna	..	..	6	32	3	65	15	193	
	Kurnool	..	..	2	15	1	28	11	1,366	
	Total ..	..	..	26	284	5	109	33	1,667	9,778
M.R.Ry. Somasundara Sastri.	Anantapur ..	..	..	18	106	8	30	4	2	10,905
	Bellary	10	24	14	84	10	69	6	22	
	Nellore	..	..	..	..	..	..	18	114	
	Total ..	10	24	32	190	18	99	28	138	10,905
Mr. W. C. McMurray.	Cuddapah	..	..	9	115	28	532	15	63	11,772
	North Arcot ..	5	23	5	23	12	157	18	100	
	Salem	2	31	18	162	18	191	10	104	
	Total ..	7	54	32	300	58	880	43	267	11,772
M.R.Ry. C. Raju Sastri.	South Arcot ..	..	..	22	110	20	74	17	51	11,661
	Tanjore	..	..	..	..	..	..	2	3	
	Trichinopoly ..	24	..	..	..	..	..	20	30	
	Madura	..	..	..	..	1	9	9	103	
	Tinnevelly ..	..	..	..	..	..	..	9	145	
	Coimbatore ..	54	818	54	818	20	347	3	361	
	Total ..	78	818	76	928	41	430	60	693	11,661
	Grand Total ..	95	896	166	1,702	122	1,518	164	2,765	44,116

Neither the number nor the area of blocks settled is, however, anything but a very rough test of the work of the Special Forest Settlement-officers. Compared with the work turned out during the preceding year, the work done by Mr. McMurray and M.R.Ry. Raju Sastri shows great improvement. The next in importance is the work turned out by M.R.Ry. Somasundara Sastri. On the whole, the Board considers that the work of all these three officers has been satisfactory. As already observed, M.R.Ry. D. Jagannadha Row was on leave for eight months.

22. The special report on the progress of Forest settlement work called for in the Government review on the last administration report has been recently submitted (Board's Proceedings, dated 6th August 1892, No. 422, Forest), and the Board has subsequently (Board's Proceedings, dated 19th August 1892, No. 447, Forest), asked for the appointment of an additional Special Forest Settlement-officer to accelerate work in the Ganjam and Vizagapatam districts, and suggested that Junior Covenanted Civilians should, if possible, be deputed for these duties, their divisional charges being filled *pro tem.* by Deputy Collectors.

23. *Work of other Settlement-officers.*—In Godávari, Anantapur and Bellary, a few of the blocks entrusted to the Revenue Divisional-officers, the settlement of which had been completed, were pending the preparation or the revision of the final notifications. All such blocks in the Anantapur district were, however, transferred towards the close of the year to the Special Forest Settlement-officer, Nellore, Bellary and Anantapur districts. The only other districts in which Divisional-officers are entrusted with forest settlement work are Ganjam, Vizagapatam, Chingleput, Nílgiris, Malabar and South Canara. The work turned out in these districts is shown in the subjoined statement :—

Abstract F (1).

District.	Name of officer.	Blocks pending with Forest Settlement-officers at the beginning of the year 1891–92.		Added during the year 1891–92.		Total.		Disposed of during the year 1891–92.		Blocks pending with Forest Settlement-officers at the end of the year 1891–92.	
		Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
			SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Ganjam	Principal Assistant Collector	6	3	3	3	9	6	..	..	9	6
	Senior Assistant Collector	3	22	..	..	3	22	..	..	3	22
	General Duty Deputy Collector, Goomsur	18	316	* 6	106	24	422	8	95	16	327
		† 27	341	9	109	36	450	8	95	28	355
Vizagapatam	Principal Assistant Collector	5	10	2	{ 15 ‡ 5 }	7	30	..	..	7	30
	General Duty Deputy Collector, Vizianagrum.	..	..	3	52	3	52	..	..	3	52
		5	10	5	72	10	82	..	..	10	82
Chingleput	Mr. Pinto	18	11	23	19	41	30	..	..	41	30
Nilgiris	Mr. H. V. Cobb	73	110	7	1	80	111	65	32	15	79
Malabar	Sub-Collector	1	40	..	..	1	40	..	..	1	40
	Mr. Castlestuart-Stuart	5	160	..	..	5	160	..	..	5	160
	Special Assistant Collector	14	200	..	..	14	200	..	..	14	200
		20	400	..	..	20	400	..	..	20	400
South Canara	Head Assistant Collector	6	9	..	..	6	9	..	..	6	9
	General Duty Deputy Collector	3	39	..	..	3	39	1	4	2	35
		9	48	..	..	9	48	1	4	8	44

* Returned by the Board for revision.

† Exclusive of six pending with the Board.

‡ Revised estimate of area.

As regards Ganjam and Vizagapatam, the Board has, as above stated, recently addressed Government regarding the advisability of appointing an additional Special Forest Settlement-officer. In Ganjam, the work done by the Senior Assistant Collector and the General Duty Deputy Collector is said to be unsatisfactory. In Vizagapatam, the Principal Assistant Collector was unable to devote the necessary time to the work owing to the *fituri* in his division and the additional work entailed by distress consequent on the unfavorable season. In Chingleput, Mr. Pinto was not able to do any work for the reasons stated at the close of paragraph 17. In the Nílgiris, Mr. Cobb has done good work, and a separate report will be submitted on the subject with reference to Government Order, dated 10th August 1891, No. 731, Revenue. In Malabar, Mr. Castlestuart-Stuart was mainly engaged in revenue settlement work and could not devote much time to the settlement of the Attapadi block. Of the other blocks pending with him, the preliminary notifications for two have been subsequently cancelled and two have been transferred to the Deputy Collector, Wynaad division. The only block pending with the Sub-Collector was awaiting the decision of an appeal in the High Court. The reports for the 14 blocks pending with the Special Assistant Collector are awaiting the disposal of appeals in certain cases. The two blocks in South Canara, pending with the Forest Settlement-officer (Deputy Collector), Southern Division, are awaiting the return of records connected with certain appeals; and the 6 pending with the Forest Settlement-officer (Head Assistant Collector), Northern division, are awaiting decision of appeals and preparation of maps and reports.

24. The area of reserved lands not brought under settlement (column 9 of abstract B. above *minus* column 35 of abstract E) is shown in column 10 of the subjoined statement:—

ABSTRACT G.—Reserved Lands not under settlement in square miles.

District.	Up to 1890-91.	Added during 1890-91.	Added during 1891-92.	Total.	Transferred for settlement. Up to 1890-91.	Transferred for settlement. During 1890-91.	Transferred for settlement. During 1891-92.	Transferred for settlement. Total.	Balance remaining reserved lands not under settlement.
1	2	3	4	5	6	7	8	9	10
Northern Circle.									
Ganjam	545	3	3	551	529	3	3	535	16
Vizagapatam	24	(a) — 10	67 + 15	96	24	(a)— 10	67 + 15	96	..
Godávari	1,020	33 (a)+ 1	(b)— 38	1,016	1,020	33 (a)+ 1	(b)— 38	1,016	..
Kistna	685	24 (a)— 22	(a)— 18 (b)— 1	668	685	24 (a)—22	(a)— 18 (b)— 1	668	..
Anantapur	276	1	(a)+ 77	354	276	1	(a)+ 77	354	..
Bellary	380	2	24 (a)+ 9 (c)— 1	414	318	2	24 (a)+ 9 (c)— 1	352	62
Kurnool	1,715	(a)+ 169	24 (a)—144	1,764	1,715	(a)+ 169	24 (a)—144	1,764	..
Total ..	4,645	201	17	4,863	4,567	201	17	4,785	78
Central Circle.									
Nellore	598	(a)— 2	(a)— 5	591	579	(a)— 2	(a)— 5	572	19
Cuddapah	2,018	..	(a)+ 6	2,024	1,838	..	(a)+ 6	1,844	180
Chingleput	177	5	13	195	156	5	19	180	15
North Arcot	953 (a) —59	..	23 (a)— 5	912	858	15	23 (a)— 5	891	21
South Arcot	549	261	— 9	801	413	246	(b)— 9	650	151
Tanjore	25	..	..	25	19	..	..	19	6
Trichinopoly	236	..	9 (a)+ 1	246	197	..	9 (a)+ 1	207	39
Salem	1,184	70	36 (a)— 1	1,289	982	134	62 (b)— 1	1,177	112
Total ..	5,681	334	68	6,083	5,042	398	100	5,540	543
Southern Circle.									
Madura	544	(a)— 51	(a)+ 26 (a)— 21	498	476	..	(a)+ 26 (a)— 21	481	17
Tinnevelly	590 (b) —1	..	..	589	589	..	..	589	..
North Coimbatore ..	1,949	..	13 (a) — 3 (b)— 8	1,951	776	502	317 (a)— 8 (b)— 8	1,584	367
South Coimbatore ..	584	..	..	584	566	..	..	566	18
Nilgiris	368	16	1	385	295	16	1	312	73
North Malabar	273 (c)+ 1	..	..	274	261	..	..	261	13
South Malabar	327 (c)+ 1	..	..	328	299	..	(a)+ 1	300	28
South Canara	1,024	..	..	1,024	152	..	(a)— 11	141	883
Total ..	5,660	— 35	8	5,633	3,414	518	302	4,234	1,399
Grand Total ..	15,986	500	93	16,579	13,023	1,117	419	14,559	2,020

(a) By rectification of area. (b) During settlement. (c) Wrongly omitted in previous abstracts.

The unsettled areas are large in Cuddapah, South Arcot, Salem, North Coimbatore and South Canara. The Collectors of Cuddapah and Salem state that steps are being taken to bring them under settlement. In South Arcot, the necessary notifications were submitted subsequent to the close of the year. Much of the area in North Coimbatore is not required to be retained under reservation and will shortly be declared to be no longer reserved.

25. *Demarcation.*—The following table shows the length of boundary lines demarcated preliminarily (before notification under section 4 of the Act) and permanently (after notification under section 16) up to and during the year, and the total and average cost of the work :—

Demarcation work done in 1891–92.

	Preliminary.							Permanent.	
	Up to 1891–92.		During 1891–92.		Total.			Up to 1891–92.	
	Miles.	Cost.	Miles.	Cost.	Miles.	Cost.	Average cost per mile.	Rough estimate (in miles) of demarcation yet to be done.	Miles.	Cost.
1	2	3	4	5	6	7	8	9	10	11
Northern Circle.		Rs.		Rs.		Rs.	Rs. A. P.			Rs.
Ganjam	..	..	..	..	..	..	..	Not given	815	12,681
Vizagapatam	..	..	23	47	23	47	2 0 8	Do.	34	102
Godávari	389	2,182	109	359	498	2,541	5 1 8	Do.	655	7,813
									* 1,694	1,448
									† 27	942
Kistna	5	57	..	..	5	57	11 6 5	Do.	511	10,327
									* 1	448
									† 24	2,770
Anantapur	20	59	12	31	32	90	2 13 0	Do.	644	9,095
Bellary	..	63	40	8	40	71	1 12 4	Do.	323	2,689
Kurnool	588	9,828	315	2,224	903	12,052	13 5 7	Do.	..	..
Total	1,002	12,189	499	2,669	1,501	14,858	9 14 5	..	4,728	48,315
Central Circle.										
Nellore	..	..	..	..	..	..	..	Not given	‡ 802	5,695
Cuddapah	1,012	20,579	117	1,374	1,129	21,953	19 7 1	1,000	..	..
Chingleput	Not given.	172	Not given.	17	..	189	..	Not given	329	8,487
North Arcot	1,354	16,005	347	3,302	1,701	19,307	11 5 7	200	382	5,751
South Arcot	130	287	316	709	446	996	2 3 9	Not given	155	955
Tanjore	..	..	142	124	142	124	0 13 11	15	..	..
Trichinopoly	254	206	70	662	324	868	2 10 10	491	101	914
Salem	430	199	..	..	430	199	0 7 5	53	1,793	15,742
Total	3,180	37,448	992	6,188	4,172	43,636	10 7 4	1,759	‡ 3,562	37,544
Southern Circle.										
Madura	..	..	..	..	..	..	..	Not given	‡ 678	5,890
Tinnevelly	..	..	..	..	..	..	..	Do.	‡ 905	9,776
North Coimbatore	701	4,418	325	2,115	1,026	6,532	6 5 10	Do.	229	1,530
South Coimbatore	..	..	..	..	..	..	..	Do.	§ 331	6,509
Nílgiris	..	..	..	..	..	..	..	Do.	§ 935	20,375
North Malabar	31	139	..	..	31	139	4 7 9	Do.	250	2,903
South Malabar	48	143	..	..	48	143	2 15 8	Do.	28	536
South Canara	569	576	48	43	617	619	1 0 0	957	174	2,925
Total	1,349	5,276	373	2,158	1,722	7,433	4 5 1	957	3,530	50,444
Grand Total	5,531	54,913	1,864	11,015	7,395	65,927	8 14 8	2,716	11,820	1,36,303

* Relates to fencing and ditching.
‡ Includes preliminary demarcation also.
† Relates to boundary marks erected.
§ The work, though classed as permanent, is considered by the Collector as preliminary.

Dem arcation work done in 1891-92—*cont.*

	Permanent—*cont.*						Reclearing old lines.						
	During 1891-92.		Total.			Rough estimate (in miles) of work yet to be done.	Up to 1891-92.		During 1891-92.		Total.		
	Miles.	Cost.	Miles.	Cost.	Average cost per mile.		Miles.	Cost.	Miles.	Cost.	Miles.	Cost.	Average cost per mile.
	12	13	14	15	16	17	18	19	20	21	22	23	24
		Rs.		Rs.	Rs. A. P.			Rs.		Rs.		Rs.	Rs. A. P.
Northern Circle.													
Ganjam	84	657	899	13,338	14 13 4	352	..	..	..	..	..	..	..
Vizagapatam	21	200	55	302	5 7 10	150	16	88	18	146	34	234	6 14 1
Godávari	..	..	655	7,813	11 14 10	226	354	1,477	95	242	449	1,719	3 13 3
	* 335	136	2,029	1,584	0 12 6								
	* 3	75	30	1,017	33 14 5								
Kistna	103	1,048	614	11,375	18 8 5	Not given.	..	..	..	..	..	..	..
	..	..	* 1	448	448 0 0								
	† 83	274	107	3,044	28 7 2								
Anantapur	11	110	655	9,205	14 0 10	Do.	128	718	60	188	188	906	4 13 1
Bellary	15	440	338	3,129	9 4 1	360	..	..	..	..	..	..	..
Kurnool	..	..	..	..	..	Not given.	..	..	..	..	..	..	..
Total	655	2,940	5,383	51,255	9 8 4	1,088	498	2,283	173	576	671	2,859	4 4 2
Central Circle.													
Nellore	102	605	904	6,300	6 15 6	Not given.	..	..	..	..	..	..	..
Cuddapah	..	..	..	..	..	Do.	..	..	..	..	..	..	..
Chingleput	75	2,445	404	10,932	27 0 11	175	..	..	..	..	..	..	..
North Arcot	490	7,086	872	12,837	14 11 6	829	..	..	..	..	..	..	..
South Arcot	137	671	292	1,626	5 9 1	Not given.	..	..	..	..	..	..	..
Tanjore	..	..	..	..	..	157	..	..	..	..	..	..	..
Trichinopoly	..	..	101	914	9 0 9	924	..	..	..	..	..	..	..
Salem	57	3,562	1,850	19,304	10 6 11	267	..	..	..	..	..	..	..
Total	861	14,369	4,423	51,913	11 11 10	2,352	..	..	..	..	..	..	..
Southern Circle.													
Madura	740	13,925	1,418	19,815	14 0 0	224	..	..	..	..	..	..	..
Tinnevelly	33	917	938	10,693	11 6 5	Not given.	..	..	..	..	..	..	..
North Coimbatore	68	761	297	2,291	7 11 5	Do.	..	..	..	..	..	..	..
South Coimbatore	33	710	364	7,219	19 13 4	Do.	..	..	..	..	..	..	..
Nilgiris	6	1,403	941	21,778	23 2 4	Do.	..	..	..	..	..	..	..
North Malabar	6	125	256	3,028	11 13 3	Do.	..	..	..	..	..	..	..
South Malabar	8	54	36	590	16 6 3	Do.	..	..	..	..	..	..	..
South Canara	19	519	193	3,444	17 13 6	1,068	..	..	..	..	..	..	..
Total	913	18,414	4,443	68,858	15 8 0	1,292	..	..	..	..	..	..	..
Grand Total	2,429	35,723	14,249	1,72,026	12 1 2	4,732	498	2,283	173	576	671	2,859	4 4 2

Note.—The difference between the total cost and the audited figures under this head of expenditure is probably due to the exclusion of establishment charges.

* Relates to fencing and ditching.

† Relates to boundary marks erected.

26. *Preliminary demarcation.*—Compared with the area of reserves under settlement, the length of boundary preliminarily demarcated up to 31st March 1892 is very small in Kistna, Anantapur and Bellary. In the other districts, with the exception of Malabar, the length of the line cleared seems to be fairly proportionate to the extent of areas placed under settlement. The small work in Kistna and Bellary has not been explained by the Collectors concerned. In Anantapur, the practice until lately was to demarcate blocks permanently even before they were finally notified under section 16. This accounts for the small amount of preliminary work done in that district. In Ganjam, Nellore, Madura, Tinnevelly, South Coimbatore and Nílgiris, no preliminary work is shown in the statement; but in the two last-named districts the work done in previous years, though classed as permanent in the Collectors' statements, is said to be only preliminary. As regards Ganjam, Nellore, Madura and Tinnevelly, the Collectors concerned have not furnished information separately for preliminary and permanent works. In Chingleput, it is stated that there are no records to show the number of miles preliminarily demarcated, though an account of the cost is kept. Much of the work done in previous years in North Arcot has either been demolished or found to be faulty.

Districts.	Area of reserves under settlement, Sq. miles.	Length of line preliminarily demarcated, Linear miles.
Kistna	216	5
Anantapur ...	323	32
Bellary	247	40

Except in the case of Cuddapah, North Arcot, Tanjore, Trichinopoly, Salem and South Canara, Collectors have not furnished information regarding the estimate of preliminary demarcation remaining to be done.

The average cost of this work per mile is high in Kurnool, Cuddapah, Kistna and North Arcot. In the Kurnool district this is apparently due to works of a permanent character being classed as preliminary. The Collector of Kistna has not explained the high cost in his district. In North Arcot a large amount of work was, as already stated, found to be faulty and had to be done over again.

27. *Permanent demarcation.*—No permanent work is shown against Kurnool, Cuddapah and Tanjore. In the first-named district, the Collector considers that all the work done hitherto must be classed as preliminary, as considerable changes in the line have to be effected owing to the addition of adjoining blocks and to the changes during settlement, while the cairns erected are said to be not sufficiently strong to serve as permanent works. The Collectors of Cuddapah and Tanjore have not stated why no permanent demarcation has been undertaken in their districts. They should now do so. In Ganjam, the Collector reports that the lines cut in former years were either crooked or narrow and that the demarcation posts were worthless. During the year under review, the lines have been broadened and more substantial marks were substituted. In Vizagapatam, roots and stumps were extracted from the permanently cleared lines in the Pálkonda agency in order to save the expense of reclearing every year. No permanent work was done during the year in Godávari, all the reserves having been finally demarcated in previous years. In Kistna, palmyra seeds were put down along the boundaries of certain reserves in Bandar, Bápatla and Bezváda ranges to combine permanency with cheapness of work. In Anantapur and Bellary, very little, and in Kurnool no, work was done during the year pending selection and settlement of reserves. In North Arcot, 490 miles were cleared to enable the Survey of India Party to proceed with their work in the district without unnecessary delay. The amount spent during the past year in this district both on preliminary and permanent work was over Rs. 10,000. In South Arcot, it is stated that, in addition to reserved forests, some of the reserved lands were permanently demarcated. The necessity for this should be explained.

In Trichinopoly no work was done during the year, though there is a considerable area of finally constituted reserved forests. The Collector should explain the omission. In Salem, the only work done was the clearing of the boundaries of the reserves in the Tirupatúr and Hosúr ranges for the Survey of India Party. The work done in Malabar and South Canara districts is insignificant owing to want of hands in the former and to the ill-health of the Range officers in the latter.

The amount of work remaining to be done has not been reported by several of the Collectors in spite of instructions issued by the Board on the subject in its Proceedings communicating the Government Order reviewing the administration report for 1889–90. In the districts of Ganjam, Vizagapatam, Godávari, Bellary, North Arcot, Chingleput, Tanjore, Trichinopoly, Salem, Madura and South Canara, it is estimated that 4,732 miles still remain to be demarcated permanently.

28. *General.*—Until recently no fixed principle was observed in regard to preliminary and permanent demarcation; in some districts no preliminary demarcation was ever done, any demarcation that was made having been made finally once for all after settlement and before submission of the notification under section 16. This accounts for the large differences in regard to the length of line demarcated in the several districts. In its Proceedings, dated 20th April 1891, Forest No. 168, the Board laid down definite instructions as to the nature of preliminary and permanent demarcation and the stage of settlement at which the two kinds of demarcation should be done, viz., that the former should be cheap and temporary and should be executed before the submission of the notification under section 4, and that the latter should be substantial and should be executed after the issue of the notification under section 16. Detailed instructions were also issued for the preparation of maps to accompany the notifications. It is believed that this alteration of system will result in avoiding the long delays which often used to occur after the completion of settlement and before the submission of final notifications.

In the Board's last administration report it was stated that the issue of a set of uniform rules for forest demarcation was under consideration. It has been since decided that the varying local conditions render the enactment of hard and fast general rules inadvisable; but draft instructions drawn up by the Conservators have been communicated to all Collectors for information and guidance.

Notices to clear the boundaries adjoining Government forests were served on the AriaGounden Nad jaghirdar, the mittadar of Shekkadipatti in the Salem District and the zemindar of Kangundi in North Arcot. In the first case the work was undertaken departmentally, but could not be finished owing to want of coolies. The clearing of the Shekkadipatti estate boundary is in progress, and the completion report for the Kangundi estate boundary is awaited. In the Madura district, the Yerasakanayakanur zemin boundary was demarcated by the department; and in the demarcation of the Madura-Travancore boundary and of the Bodinayakanúr zemin boundary, it was observed that certain Government lands had been treated as private lands. Steps are being taken to have the mistakes rectified.

CHAPTER III.

Surveys and Working Plans.

29. The total actual cost of survey by the Government of India Party during the survey year 1891–92 has not been reported, but calculating it out from the cost per mile given in the following paragraph it comes approximately to Rs. 63,923. The cost for the official year was Rs. 75,874. The departmental survey for the official year under report has cost Rs. 15,369.

30. The outturn of work by the Survey of India Party for the "survey year" ending with 31st August 1892 is as follows:—

Districts.	Triangulation.	Traversing.	Topography.
	SQ. MILES.	LIN. MILES.	SQ. MILES.
Coimbatore	1,000	65·7	307
Madura	196	181	328
Tinnevelly	..	5·8	24
Total ..	1,196	252·5	659

The country surveyed during the year, including a portion of the Anamalais, the Palnis, and the Hills known as the "High Waving" in the Madura district, was of a

very difficult character. In spite of this, however, and of consequent sickness, casualties and desertions among the staff, the outturn of topography is the highest hitherto attained as will be seen from the following table, while the cost rate as furnished by the Deputy Superintendent in charge, is lower than in any previous year:—

Year.	Triangulation.	Traversing.	Topography.	Cost per square mile.
	SQ. MILES.	LIN. MILES.	SQ. MILES.	RS.
1888–89	1,144	240	168	162
1889–90	970	611	214	149
1890–91	1,050	274	440	112
1891–92	1,196	252·5	659	97

The Survey of India Party would have completed its work in the Madura district but for the sickness of surveyors and changes in the programme. Only 79 square miles still remain to be surveyed in the district and this will be completed in the current year. Along with the detail survey a certain amount of boundary traversing had to be undertaken in Madura and South Coimbatore, but much time, labour and expenses were saved owing to the boundaries in many instances having been previously surveyed by the Revenue Survey Department.

31. The departmental survey work was generally undertaken for the selection and settlement of reserves. The surveyors employed in Anantapur, Cuddapah and South Arcot are reported to have been incompetent and turned out very little and very inaccurate work. The Conservators concerned should endeavour to get better men to replace them. The illness of the surveyors in Kurnool accounts for the short work turned out in those districts. In Bellary, North Arcot, Chingleput, Madura, Coimbatore and Malabar no departmental survey was undertaken.

32. In Madura, the map of the Kodaikánal settlement was published during the year, but not the map of the Palni Hills.

33. The dispute regarding the boundary of the Kodaikánal shola, which has been pending for the last three years, has not yet been decided by the Survey Department in spite of several reminders issued to the Deputy Superintendent. The Collector will address the Superintendent, Revenue Survey, on the delay and report further on the matter. It is believed that the topography of the Kotagudi valley in Bodináyakanúr zemindari was completed during the year by the Madras Survey Department, but no map or report was received.

34. In the Nílgiri district, the services of the surveyor deputed to clear the Mysore-Nílgiri boundary were utilized in surveying two blocks of teak forests in the Benne reserve which are intended to be devoted to experimental planting. The Black Bridge plantation on the Nílgiri Hills was surveyed by the Ranger in view to the formation of a working plan. In South Arcot, the survey of certain coupes was made for the preparation of working plans.

Working Plans.

35. *Preliminary measures.*—In *Ganjam* sample areas were marked off in the different reserves to determine the growth of sâl. In *Kistna*, *North Arcot*, *Salem*, *Madura* and *Tinnevelly*, the *coupe* system of felling has been introduced and *data* for the preparation of working plans are being collected. In *Nellore* and *South Arcot* an enumeration of the trees in some of the coupes is being made to ascertain the yield. In the latter district much difficulty was experienced in collecting *data* for the preparation of a working scheme for the five casuarina plantations on the coast, owing to the desultory system of planting adopted in former years. The Collector reports that, owing to pressure of work, it was not found possible to survey and mark out the coupes in the compartments. Equalising compartments and sub-compartments so as to have a sustained and regulated yield was also found to be a matter of difficulty owing to the variegated nature of growth. In the Begur reserve situated in *North Malabar* the clearing and cutting of compartment lines was made as a preliminary step to the framing of working plans, though the Collector is of opinion that a valuation survey should be made before working plans can be attempted. The frequent changes of District officers prevented any progress being made towards the development of

working plans in *Godávari.* In *Kurnool*, a block of 30 square miles in Nandyál taluk near the railway was selected for the preparation of a working plan, and was placed under special protection against fire and cattle, but the preparation of the working plan has been held in abeyance pending the survey of the block. In *Chingleput*, the experimental felling made by the District Forest-officer in certain selected areas in Sattiavédu proved very costly as it was undertaken during the harvest season when there was difficulty in procuring labour. Compartment lines have been cleared in Sattiavédu and Aradur forests for making further experiments.

36. *Regular working plans.*—In *Anantapur* the working plan of the Kojjapalli forest was not carried out, there having been no demand for timber; and owing to the dryness of the season, even the attempts made to sow up some of the blanks were unsuccessful.

In *Cuddapah* the felling of the first block of the Balapalli forest was carried out incomplete accordance with the working plan. The operations extended over ten years from 1882 to 1891 and the average outturn was $15\frac{3}{4}$ tons per acre. A working plan of the second block of the same forest has been drawn up commencing from 1892–93.

In *Nellore* the working plan of the casuarina plantations could not be adhered to as in the previous year, owing to heavy casualties caused by failure of rain and by the attacks of grubs. Khandam No. 2 of the Śríharikót forest was felled over during the year according to plan. Certain improvement fellings were made in the Survépalli reserve; but when the wood which was felled was put up to auction, there were no bids and it had to be sent to Nellore for sale. There is yet no private demand for wood cut departmentally, and the railway is well supplied from private forests, so that there will be no market for the produce of Government forests for some time to come. It is intended to put up certain coupes in Nellore and Gúdúr ranges for sale by auction.

In *North Arcot* the working plan of the Ambúr fuel reserve was abandoned and the reserve closed to all cutting. The working plan for the casuarina plantations is in hopeless confusion, as, owing to drought, whole compartments died out and had to be felled in advance of the rotation. The *data* adopted for drawing up the Napier-Mamandur working plans were found to be incorrect, as also the system of felling, viz., the coppice with standards.

Salem.—The area for felling provided in the working plan of the Morur forest was so small, and the produce so insufficient, that no contract could be secured for the Railway Company.

Trichinopoly.—The working plan for the Cauvery South Bank plantation was adhered to.

Madura.—The Alagar Hill forest and the Gundan Shola plantation were not felled for want of demand though planting was undertaken according to the plan.

South Coimbatore.—The provisions of the revised working scheme of the Sholakarai block were duly observed and the average revenue realized from fuel and bamboos was Rs. 1·51 per acre per annum.

Nilgiris.—A preliminary working plan for two blocks in the Benne reserved forest was framed, and another for the Black Bridge plantation at Coonoor was under preparation. The working plans of the Eucalypti plantations were modified with the Conservator's approval from simple coppice to coppice with standards for high timber. The Aramby plantation, the Cairn Hill, and the Governor's shola were all felled under the plan of operations. The Collector reports that the working plans of the Coonoor ranges having been based more on the estimated yield than on the demand, there was some loss of felled wood and it became necessary to hold some of the anticipated supplies in abeyance. The market was glutted by the shola wood felled by the Railway Company in the ghât reserves and the trees blown down by landslips and floods.

In the Nilambúr teak plantation in *South Malabar*, the full number of trees proposed to be thinned according to the revised working scheme drawn up by the Conservator was not available and the number had to be reduced in proportion to the deficiency found in the standing stock on re-enumeration.

37. It will be seen from the above that but little progress has been made in the elaboration and execution of scientific working plans. The Board does not, however, think that, under present circumstances, this could well be otherwise. As recently

pointed out (Board's Proceedings, dated 1st August 1892, Forest No. 410), the great needs of the present time in regard to Forest administration are (i) the completion of settlement with its accompanying duties of demarcation and formation of boundary lines, rides and fire-traces; (ii) the enlistment and training of competent subordinate establishments. Till these problems have been successfully solved, the preparation of elaborate working plans must be more or less a "counsel of perfection" for which the time is not yet ripe.

CHAPTER IV.

Protection and Improvement.

(a) *Establishment, Ranges and Beats.*

38. The establishment as it stood on the 31st March 1892 is shown below in comparison with that entertained on the corresponding date in 1891 :—

	Northern Circle.			Central Circle.			Southern Circle.			Remarks.
	1890–91.	1891–92.	Difference.	1890–91.	1891–92.	Difference.	1890–91.	1891–92.	Difference.	
Permanent.										
Conservators	1	1	..	..	1	+ 1	1	1	..	In the Conservators' reports for 1890–91, the number reported was according to the sanctioned scale, while that entered here for that year was the strength actually employed.
Deputy Conservators	2	3	+ 1	4	(a) 6	+ 2	6	6	..	
Assistant Conservators	4	4	..	3	3	..	5	4	— 1	
Extra Assistant and Sub-Assistant Conservators.	5	5	..	5	5	..	4	4	..	
Forest Rangers	15	15	..	22	22	..	20	20	..	
Foresters	31	31	..	48	48	..	48	48	..	
Forest Guards	222	222	..	299	299	..	210	210	..	
Clerks	18	18	..	42	42	..	45	45	..	
Peons	66	66	..	64	64	..	56	56	..	
Attenders	..	..	..	6	6	..	7	7	..	
Total	364	365	+ 1	493	496	+ 3	402	401	— 1	
Temporary.										
Surveyors	8	10	+ 2	3	5	+ 2	3	4	+ 1	
Draughtsmen	1	8	+ 7	10	12	+ 2	1	2	+ 1	
Foresters	7	6	— 1	4	4	..	..	..	..	
Overseers	..	..	..	1	1	..	..	..	..	
Supervisors	..	..	..	4	4	..	23	23	..	
Depôt Keepers	..	..	..	3	3	..	5	5	..	
Clerks	52	55	+ 3	24	40	+ 16	10	15	+ 5	
Permit Keepers	..	..	..	17	17	..	5	5	..	
Guards	6	3	— 3	6	6	..	2	2	..	
Peons	62	76	+ 14	25	24	— 1	3	7	+ 4	
Mahouts	8	8	..	..	..	..	54	58	+ 4	
Tannahdars	177	197	+ 20	200	199	— 1	189	189	..	
Maistries	6	4	— 2	14	15	+ 1	2	2	..	
Gardeners	65	57	— 8	54	58	+ 4	23	23	..	
Lascars	10	7	— 3	4	6	+ 2	3	6	+ 3	
Watchers	150	101	— 49	724	747	+ 23	239	198	— 41	
Boat Syrang	2	2	..	1	1	..	1	1	..	
Total	554	534	— 20	1,094	1,142	+ 48	563	540	— 23	
Grand Total	918	899		1,587	1,638	..	965	941	..	

(a) Includes the Examiner of Forest Accounts.

The strength of the permanent establishment shows no increase or decrease as compared with that of the previous year except in regard to the appointment of a third Conservator during the year and the addition of two other officers to the upper controlling staff. Under temporary establishment, the expansion of settlement and other forest operations accounts for the increase in the staff of surveyors and draughtsmen while the increase in the number of clerks employed is due to clerical help having been given to officers in charge of ranges to relieve them in office work and to afford more time for field duty. The variations under other classes of temporary establishment have been regulated consistently with local circumstances and no special remarks are called for.

(b) *General Protection and Breaches of Forest Laws.*

39. The following statement shows the number of forest offences reported during the year and the particulars of their disposal :—

Districts.		Cases pending at the beginning of the year.	Cases reported during the year.	Total number of cases for disposal (columns 2 and 3).	Number of cases withdrawn.	Number of cases compounded.	Number of cases taken into Court and dealt with by Magistracy during the year.	Total number of cases disposed of (columns 5, 6 and 7).	Number of persons concerned in cases disposed of.	Balance of cases undisposed of (column 4 *minus* column 8).	Percentage of cases withdrawn to cases disposed of.	Percentage of cases compounded to cases disposed of.	Number of convictions.	Number of acquittals.	Percentage of acquittals to cases disposed of by Magistracy.	Amount of compensation fees realized for cases compounded.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
																Rs.
Ganjam	1890–91 ..	8	86	94	..	21	13	34	88	60	..	62	4	9	69	602
	1891–92 ..	**60**	**140**	**200**	..	..	**65**	**65**	**217**	**135**	..	..	**53**	**12**	**18**	**250**
Vizagapatam ..	1890–91 ..	31	641	672	..	169	333	502	620	170	..	34	292	41	12	493
	1891–92 ..	**170 (a)—12**	**663**	**821**	..	**278**	**453**	**731**	**838**	**90**	..	**38**	**408**	**45**	**10**	**787**
Godávari	1890–91 ..	3	136	139	..	5	65	70	127	69	..	7	43	22	34	22
	1891–92 ..	**69**	**29**	**98**	..	**5**	**87**	**92**	**177**	**6**	..	**5**	**13**	**74**	**85**	**1,942**
Kistna	1890–91 ..	50	258	308	18	106	155	279	644	29	6	38	133	22	14	624
	1891–92 ..	**29**	**501**	**530**	**3**	**171**	**185**	**359**	**1,329**	**171**	**1**	**48**	**130**	**55**	**30**	**2,693**
Anantapur	1890–91 ..	7	91	98	..	11	75	86	151	12	..	13	69	6	8	150
	1891–92 ..	**12**	**113**	**125**	..	**24**	**63**	**87**	**227**	**38**	..	**28**	**55**	**8**	**13**	**372**
Bellary	1890–91 ..	4	76	80	..	12	56	78	236	2	..	28	33	23	41	65
	1891–92 ..	**2**	**164**	**166**	..	**34**	**127**	**161**	**386**	**5**	..	**21**	**101**	**26**	**20**	**188**
Kurnool	1890–91 ..	1	290	291	..	70	202	272	917	19	..	26	117	85	42	1,852
	1891–92 ..	**19**	**400**	**419**	..	**83**	**313**	**396**	**1,105**	**23**	..	**21**	**231**	**82**	**26**	**1,346**
Nellore	1890–91 ..	17	52	69	..	8	41	49	201	20	..	16	33	8	20	51
	1891–92 ..	**20**	**114**	**134**	..	**14**	**98**	**112**	**383**	**22**	..	**13**	**50**	**48**	**49**	**71**
Cuddapah	1890–91 ..	24	257	281	..	118	141	259	828	22	..	46	115	26	18	1,030
	1891–92 ..	**22**	**606**	**628**	..	**185**	**265**	**450**	**1,181**	**178**	..	**41**	**210**	**55**	**21**	**1,538**
Chingleput ..	1890–91 ..	..	156	156	..	16	139	155	323	1	..	10	100	39	28	50
	1891–92 ..	**1**	**174**	**175**	..	..	**150**	**150**	**252**	**25**	..	..	**95**	**55**	**37**	**23**
North Arcot ..	1890–91 ..	7	334	341	..	209	120	329	721	12	..	64	77	43	36	2,353
	1891–92 ..	**12**	**700**	**712**	..	**504**	**135**	**639**	**1,054**	**73**	..	**79**	**97**	**38**	**28**	**3,761**
South Arcot ..	1890–91 ..	105	723	828	20	344	104	468	1,224	360	4	74	87	17	16	2,740
	1891–92 ..	**360**	**1,046**	**1,406**	**183**	**478**	**254**	**915**	**2,365**	**491**	**20**	**52**	**214**	**40**	**16**	**3,125**
Tanjore	1890–91 ..	4	26	30	..	9	9	18	155	12	..	50	9	..	..	13
	1891–92 ..	**12**	**18**	**30**	..	**14**	**13**	**27**	**121**	**3**	..	**52**	**8**	**5**	**38**	**67**
Trichinopoly ..	1890–91 ..	78	747	825	..	438	333	771	1,495	54	..	57	271	62	19	1,295
	1891–92 ..	**54**	**949**	**1,003**	..	**645**	**295**	**940**	**1,612**	**63**	..	**69**	**242**	**53**	**18**	**2,188**
Salem	1890–91 ..	29	747	776	49	133	562	744	2,752	32	7	18	457	105	19	644
	1891–92 ..	**32**	**1,116**	**1,148**	**61**	**498**	**556**	**1,115**	**4,710**	**33**	**5**	**45**	**435**	**121**	**22**	**4,109**
Madura	1890–91 ..	..	18	18	..	2	14	16	61	2	..	13	9	5	36	31
	1891–92 ..	**2**	**28**	**30**	**1**	**6**	**23**	**30**	**94**	..	**3**	**20**	**13**	**10**	**43**	**99**
Tinnevelly	1890–91 ..	5	124	129	8	5	107	120	365	9	7	4	83	24	22	109
	1891–92 ..	**9**	**162**	**171**	**9**	**2**	**145**	**156**	**405**	**15**	**6**	**1**	**97**	**48**	**33**	**432**
North Coimbatore ..	1890–91 ..	7	132	139	12	72	15	99	283	40	12	73	7	8	53	1,088
	1891–92 ..	**40**	**181**	**221**	**11**	**96**	**65**	**172**	**670**	**49**	**6**	**56**	**31**	**34**	**52**	**1,305**
South Coimbatore ..	1890–91 ..	12	349	361	14	212	76	302	1,092	59	5	70	72	4	5	1,963
	1891–92 ..	**59**	**448**	**507**	**30**	**289**	**142**	**461**	**1,396**	**46**	**6**	**63**	**119**	**23**	**16**	**1,683**
Nilgiris	1890–91 ..	..	18	18	..	12	3	15	73	3	..	80	2	1	33	196
	1891–92 ..	**3**	**126**	**129**	**2**	**68**	**23**	**93**	**267**	**36**	**2**	**73**	**16**	**7**	**30**	**593**
North Malabar ..	1890–91 ..	..	22	22	..	16	6	22	41	..	..	73	5	1	17	203
	1891–92 ..	..	**25**	**25**	..	**21**	**4**	**25**	**75**	..	..	**84**	**2**	**2**	**50**	**87**
South Malabar ..	1890–91 ..	2	32	34	..	1	33	34	65	..	..	3	24	9	27	25
	1891–92 ..	..	**18**	**18**	..	..	**17**	**17**	**46**	**1**	..	..	**12**	**5**	**30**	..
South Canara ..	1890–91 ..	69	262	331	..	55	215	270	393	61	..	20	187	28	13	160
	1891–92 ..	**61**	**403**	**464**	..	**97**	**318**	**415**	**592**	**49**	..	**23**	**236**	**82**	**26**	**726**
Total ..	1890–91 (b)	463	5,577	6,040	121	2,054	2,817	4,992	12,855	1,048	3	41	2,229	588	21	15,759
	1891–92 ..	(a) **1,036**	**8,124**	**9,160**	**300**	**3,512**	**3,796**	**7,608**	**19,502**	**1,552**	**4**	**46**	**2,868**	**928**	**24**	**27,385**

(a) Twelve cases withdrawn at the close of the year 1890–91 were by mistake shown as pending in the report for 1890–91.

(b) As per annual Forms 63 printed in 1890–91 report.

These figures do not include cases in which cattle found grazing without authority were simply impounded. With regard to the number of cases remaining undisposed of at the end of the year, Collectors have not stated how many of them are pending with Magistrates and how many with Forest-officers. In future the number of cases sent into Court by the department, the number disposed of by the Magistracy, and the number pending with the Magistrates at the end of the year should be separately shown.

40. The number of offences added in 1891–92 shows a large increase, which occurs chiefly under unauthorised fellings and grazing. The increase is spread over most of the districts and is specially notable in those noted in the margin. The failure of rains compelled the people in Kistna, Cuddapah and South Arcot to resort to unauthorised grazing and lopping of branches for fodder in order to save their cattle from starvation. The restriction of the permit in favour of the coupe system in North Arcot had a great deal to do with the increase in the number of cases detected in that district; as the people get familiar with the new system the number of cases will, it is hoped, diminish. In Trichinopoly, the increase is attributed to the inadequacy of the existing staff to prevent offences. It is reported that systematic frauds were practised in Salem by merchants purchasing sandalwood trees on private lands who removed Government trees under cover of private permits. This practice has been put a stop to by insisting on the merchants marking their trees before felling. The increase in the Nílgiris is the result of more effectual supervision by the District Forest-officer over his subordinates, who appear to have been slack in detecting offences during the previous year. There is a decrease in the number of cases reported in a few districts, notably in Godávari (—107), where there was no District Forest-officer during the greater part of the year, the Treasury Deputy Collector who held charge having naturally made no local inspection and left the Range officers uncontrolled.

Kistna	+ 243
Cuddapah	+ 349
North Arcot	+ 366
South Arcot	+ 323
Trichinopoly	+ 202
Salem	+ 369
Nílgiris	+ 108
South Canara	+ 141

41. The percentage of acquittals to the number of cases taken to Courts was unsatisfactorily high, and was specially large in Godávari (85), and in Nellore (49), Chingleput (37), Tanjore (38), Madura (43), Tinnevelly (33), North Coimbatore (52), and North Malabar (50). In Godávari it is attributed to the tendency on the part of the Magistrates to reject the testimony of Forest guards where it is unsupported by other witnesses. The Board, however, thinks that, for the reason stated in the preceding paragraph, the cases were not properly inquired into by the department before they were sent up to the Magistracy. In Nellore it is said that, owing to delays in the disposal of cases by Magistrates, the prosecution witnesses are generally gained over. This explanation, as observed by the Conservator, is not satisfactory. The Collectors of the other districts have not explained the large percentage of acquittals. They will now do so, and will do their best to prevent the recurrence of these unsatisfactory figures which evidence the trumping up of false cases and inadequate inquiry by Forest-officers before prosecution.

42. The proportion of the number of cases compounded to the total number of cases disposed of is larger than in the preceding year, especially in Salem, North Arcot, Trichinopoly and North Malabar, but the Collectors concerned have not given any satisfactory explanation of the reason. In North Malabar, where the proportion of acquittals has also greatly increased, it can hardly be due to more careful inquiry prior to prosecution.

Salem	+ 27 per cent
North Arcot	+ 15 „
Trichinopoly	+ 12 „
North Malabar	+ 11 „

43. The Board notes that the number of cases pending disposal at the end of the year was large in the districts of Ganjam, Kistna, Cuddapah and South Arcot. In Ganjam it is said that, for the greater part of the year, there was only one Magistrate competent to try forest cases. In South Arcot, the Collector reports that a number of cases which have been actually disposed of are shown as pending for want of information from Range officers as to the release or sale of the confiscated property or other matters. The figures given are thus apparently incorrect. No explanation

is furnished for the delay in the disposal of forest cases in Kistna and Cuddapah. It is probably due, in part at any rate, to the greatly increased number of offences reported during the year. The Collector of Tinnevelly complains that Magistrates often unnecessarily require the attendance of forest subordinates to the detriment of their other duties. He should deal with this matter in his capacity as District Magistrate. The Conservator states that orders issued by the Salem District Magistrate in this connection have produced much improvement. On the whole, though the number of cases undisposed of shows an absolute increase as compared with the preceding year (1,552 as against 1,048), the relative percentage to the total number of cases for disposal remains the same, viz., 17 per cent. in each year. As above remarked, the information at present supplied does not enable the Board to discriminate between non-disposals by the department and by the Magistracy.

(c) *Forest Fires and Fire-protection.*

44. The amount expended on fire-protection during 1891–92 was Rs. 45,318 against Rs. 41,460 in the year previous.

The following statement shows the work done in the three circles compared with the results of the preceding years :—

Circle.	Up to 31st March 1890.		During 1890–91.			During 1891–92.		
	Area of forest reserves protected.	Total cost per square mile.	Area protected.	Percentage of area protected which escaped fire.	Average cost per square mile.	Area protected.	Percentage of area protected which escaped fire.	Average cost per square mile.
	SQ. MLS.	RS. A. P.	SQ. MLS.		RS. A. P.	SQ. MLS.		RS. A. P.
Northern	1,462	26 7 3	1,532	95	6 3 2	1,103½	96	10 11 3
Central	2,105	37 15 6	2,288	98	5 10 9	2,321	94	6 2 4
Southern	1,042½	87 6 11	1,108	91	17 2 3	1,172	92	16 6 7
Total ..	4,609½	45 8 1	4,928	95·4	8 6 7	4,596½	94	9 13 9

The apparent anomaly between the increase of cost and decrease of area under protection occurs chiefly in the Northern Circle where larger areas were in previous years treated as protected though they were really not so. In this connection attention is invited to the remarks made in paragraph 7 of the Board's last Administration Report. The longer duration of drought during the year has also added to the cost of protection during the year under review. In the Central and Southern Circles, it will be observed, the protected area has been slightly increased. The percentage of protected area visited by fire was somewhat higher than in 1890–91, but considering the abnormal want of rain which prevailed over large portions of the Presidency in the year under report, this is not surprising.

45. The progress of fire-protection in the various districts is noticed in detail below.

A small area of 193 square miles was placed under special protection in Ganjam, from 1891–92. The operations in the previous years consisted of the employment of a number of fire-patrols, who had the charge of protecting the reserves generally.

In Vizagapatam, owing to the failure of the monsoon, the forest growth in Pálkonda which was unusually dry was burnt down.

In Godávari, the area under special protection was reduced to render protection more effectual in the absence of full staff of establishment. About 7 square miles of tract was all that was burnt during the year.

In Kistna, reserves aggregating an area of 69 square miles were placed under rigid protection by the complete exclusion of cattle, while almost double the area where grazing was permitted was only partially protected. The Collector reports that only 2 square miles of forests have been burnt, which is satisfactory.

In Anantapur, the area burnt is about 3 square miles out of 234 square miles attempted.

No addition was made to the specially protected area in Bellary. About 6 per cent. of the protected area suffered from fires which occurred chiefly in the Rámán-

drug range. The Rajah of Sandúr cordially co-operated in securing the successful fire-protection of the Sandúr forests which resulted in the preservation of grass for supply to the district of Bellary during the recent scarcity.

In Kurnool, there were fewer fires on the Yerramalai Hills, owing rather to the absence of grass than to better protection. In the Nallamalai Hills also the fires have been fewer and far less extensive than usual. The Zangambhavi block, which showed great promise in its natural reproduction, was burnt down by fire arising from an engine spark.

In the Seshachalam and Lankamalai reserves of the Cuddapah district there were several extensive fires which, however, did not do much damage to the trees.

In Chingleput, the Kambakkam, Nagalapuram and Pulrambakkam forests were alone under special protection. Interior fire-lines were cut in the two former and fire-patrols employed. There were two cases of incendiarism by which about 60 acres of grass lands were burnt. The damage was not great.

It is satisfactory to find that the area burnt out of the blocks under special protection in North Arcot is very small. The District Forest-officer, however, attributes this chiefly to over-grazing which leaves nothing on the ground to burn. The Conservator does not consider this explanation probable, but thinks that the decrease should be ascribed to fear on the part of the ryots that if the grass is burnt they would have no fodder left for their cattle. To facilitate grazing, four reserves were transferred from specially protected areas to generally protected ones.

In spite of the drought, there has been no fire in any of the specially protected blocks in Salem chiefly owing to there having been very little grass to burn. The growth in the reserves on the sides of the railway line was cleared for protection from engine sparks as desired by the Conservator.

A very large proportion of the reserves in the Madura district is fire-protected. The average cost per square mile is high. Considering the season, the result has been satisfactory. There were 13 fires in 10 blocks, 9 of which were protected and 1 unprotected. The area burnt was 4 square miles. No appreciable damage was done, except in two cases, in which a number of poles and seedlings were destroyed.

The present system of treating all the hill forests in Tinnevelly as specially protected is condemned both by the Collector and Conservator, as the present establishment is unable to cope with the existing areas. The protected area should be reduced to what can be effectually guarded or an increase of temporary establishment applied for pending the definite reorganization of the subordinate staff.

In Srívilliputur, there was a very large fire, the work of an incendiary. The fire-lines cut are not close enough for real protection, and as soon as the reserves are divided into compartments, the Collector promises to rectify the lines.

Two large fires occurred in South Coimbatore, by which 3,000 and 4,000 acres respectively were burnt in Tunakadavu range which had escaped fires for the past four years. They are believed to have originated from the hill men not putting out their cooking fires properly, but the real culprits have not been traced out.

Hitherto the open grass hills in reserved forests on Nílgiris were fire-protected in addition to the sholas which necessitated the maintenance of numbers of fire-patrols to prevent the grass being burnt. In spite of these precautions, the grass was almost invariably burnt by the Todas and Badagas, who generally regard the protected grass as useless to their cattle. To obviate this, the grass was in the year under report carefully burnt early in the season under the District officer's supervision. The result was satisfactory and the saving in cost considerable. In 20 cases, the fires in reserved forests were caused by incendiaries and some sholas were singed.

(d) *Grazing.*

46. The present policy of the Madras Government in regard to the provision of grazing and fodder in Government forests was clearly enunciated in its order, dated 29th October 1890, No. 844. According to that order, the idea of forming village forests from which the wants of the agricultural population in regard to fodder, pasturage, &c., were to be met was altogether abandoned, as it was thought that without proper supervision lands assigned for such a purpose would not be properly worked. It was therefore decided that the sources of fodder supply should be kept under Government control and should be constituted reserved forests under the Act.

At the same time, the necessity of treating different forests in different ways, some as fuel and fodder reserves and others as "high forest" according to the character of the growth and the circumstances of the locality, of closing to grazing such areas of fodder reserves as it may from time to time be desirable to protect from cattle, and of restricting the number of cattle to be admitted to reserved areas open for grazing with reference to the capacity of the forests to sustain grazing without injury, was fully recognized. In those taluks in which the area already taken up will not be sufficient to furnish grazing for all cattle necessary for agricultural or domestic purposes, it was ordered that more lands should be taken under forest management. For this purpose, Collectors were instructed to consider the circumstances of each taluk, this area being treated as the unit for purposes of fodder reserves. Accordingly schemes for further reservation are under preparation in each district. In Government reserves, the cattle actually required for agricultural and domestic purposes have been held to have the first claim and surplus animals are to be allowed grazing only when the circumstances permit of it. The number of cattle required for agricultural purposes is assumed to be three head of cattle per holding, the "holding" being taken as the average acreage cultivated by a pair of tilling cattle according to the ascertained practice in each taluk. These agricultural cattle are to be charged half the rates of fees charged for other cattle; and for the latter class the following scale of fees has been laid down as a maximum :—

	Per annum. RS. A. P.
Buffaloes	0 8 0
Bulls, cows, bullocks, calves, horses, asses and foals	0 4 0
Sheep and goats	0 2 0

Goats, however, are to be excluded altogether or confined to special restricted areas. In unreserved lands grazing and the cutting of grass are to be free and unrestricted—*vide* rule 9 of the rules under section 26 of the Act. These principles received the entire approval of the Government of India, and Collectors have been requested to give effect to them, reporting in due course how they propose to distinguish agricultural from non-agricultural cattle. Reports on the subject have been received from Madura, Tinnevelly, Nílgiris, Kistna, North Arcot and Salem; and they will be separately reviewed. Until such a distinction is made and the number of agricultural cattle in each taluk is fixed and determined, it has been decided to continue to charge the same rates of fees for all cattle.

47. Most Collectors have omitted to report what steps have been taken to give effect to the general policy described above. The only Collectors who allude to the subject are those of Kistna, Bellary, South Arcot, Tinnevelly, Nílgiris and South Canara. In Kistna and South Arcot, the area already taken up is not sufficient for the requirements of the agricultural population. Until additional areas are reserved it will not be possible to take further steps. In Bellary the Collector states that information is being collected and that the system will be brought into force as soon as possible. In Tinnevelly and the Nílgiris, it is stated that nothing can be done until the village officers have made a complete census of the agricultural cattle in the districts. In South Canara, the system is inapplicable, because the land is naturally forest and not grass land. What is wanted to meet the demand for fodder during the dry season is the storing of hay from the huge quantities of grass that now run to waste at the close of the monsoon in lands not under the control of the department.

48. Information regarding the rates of fees charged on cattle is not clearly given in the districts reports. So far as can be gathered from them, it appears that the maximum fees prescribed by Government are charged in Kistna, Cuddapah, Tanjore, North Coimbatore and South Coimbatore. In Kurnool, Ganjam and Godávari, half those rates are levied. In Bellary, full rates are charged in some of the reserves, half rates in some and quarter rates in others. In South Arcot, the cattle of the villages within three miles of reserves are charged half rates, all others being treated as foreign cattle and charged full rates. In Trichinopoly, half rates are charged in the forests on the plains and full rates in those on the hills. In Tinnevelly and Nilgiris, half rates are charged in the upper slopes and above the ghâts and quarter rates in the lower slopes and below the ghâts respectively. In Salem, the rates are one-fourth of the prescribed maxima. In North Malabar, special rates, viz., three annas for buffaloes and

two annas for cows, are charged. The Collectors of other districts have not furnished any information. The matter should be adequately noticed in future reports.

49. The following abstract shows the number of cattle grazed in the forests, the revenue realized and the incidence of revenue per head of cattle:—

ABSTRACT J.—Grazing and grass collections.

	By grazing per head.						By grazing contracts and sale of grass.	
	During 1890-91.			During 1891-92.			During 1890-91	During 1891-92.
	Number of cattle.	Amount of revenue.	Average rate per head of cattle.	Number of cattle.	Amount of revenue.	Average rate per head of cattle.	Amount of revenue.	Amount of revenue.
Northern Circle.		Rs.	Rs. A. P.		Rs.	Rs. A. P.	Rs.	Rs.
Ganjam	..	..	..	..	..	..	4	131
Vizagapatam	816	102	0 2 0	365	95	0 4 2	..	13
Godávari	26,182	4,181	0 2 7	17,276	2,842	0 2 7	1,346	989
Kistna	(a) ..	6,622	..	35,740	6,850	0 3 0	34,548	36,629
Anantapur	10,974	1,448	0 2 1	11,658	1,498	0 2 1	209	308
Bellary	2,966	435	0 2 4	5,244	633	0 1 11	639	7,945
Kurnool	90,063	9,021	0 1 7	126,709	12078	0 1 6	..	..
Total	..	21,809	..	..	23,996	..	36,746	46,015
Central Circle.								
Nellore	..	..	..	..	..	..	13,075	13,861
Cuddapah	29,275	7,126	0 3 11	52,151	11,394	0 3 6	503	235
Chingleput	11,465	2,337	0 3 3	14,159	909	0 1 0	..	..
North Arcot	(a) ..	7,885	..	96,121	11,416	0 1 11	..	2,109
South Arcot	51,729	4,829	0 1 6	51,313	4,094	0 1 3	..	..
Tanjore	3,593	576	0 2 7	3,947	649	0 2 8	..	..
Trichinopoly	16,348	2,510	0 2 5	22,914	2,438	0 1 8	4,005	2,724
Salem	268,955	14,096	0 0 9	186,522	10,121	0 0 10	..	..
Total	..	39,359	..	..	41,021	..	17,583	18,929
Southern Circle.								
Madura	15,585	2,319	0 2 5	11,507	1,383	0 1 11	..	..
Tinnevelly	3,463	505	0 2 4	13,145	1,540	0 1 10	333	618
North Coimbatore	241,950	20,427	0 1 3	(a) ..	36,381	0 3 0	267	651
South Coimbatore	42,000	6,435	0 2 5	84,285	8,523	0 1 7	1,648	801
Nilgiris	4,703	1,320	0 4 6	9,497	2,553	0 4 3	691	770
North Malabar	(a) ..	447	..	2,927	397	0 2 2	..	..
South Malabar	..	..	..	..	..	..	126	144
South Canara	..	..	..	..	..	..	..	..
Total	..	31,453	..	..	50,777	..	3,065	2,984
Grand Total	..	92,621	..	..	1,15,794	..	57,394	67,928

(a) The District Forest-officer does not give the figure.

The fees derived from grazing show a large increase, which is specially noticeable in the districts of *Kurnool*, *Cuddapah*, *North Arcot* and *North Coimbatore*. The admission of zemindari cattle on payment of full rates on account of the recent bad season accounts for the increase in North Arcot; while that in North Coimbatore is chiefly due to the levy of full rates on cattle-breeders who had hitherto paid half fees. The Collectors of Cuddapah and Kurnool have not explained the cause of the increase in their districts; but it is apparently due to the bad season and the consequent resort of cattle to reserved grazing grounds. The receipts in the districts of *Godávari*, *Salem*, *Madura* and *Chingleput*, where free grazing was permitted on account of the unfavorable season, show, on the other hand, a considerable decrease.

In *Ganjam*, no permits were taken out for grazing and the Collector considers that it would be impossible to control the grazing in the forests with the limited establishment. In *Vizagapatam*, there is very little demand for grazing in the reserves, as there is abundant pasture in the Agency valleys near them where grazing is allowed free, and the reserves themselves fail to supply grazing except for goats after December. In the *Nilgiris*, the statistics regarding number of cattle are said to be not quite accurate and the payment of fees is reported to be evaded by a large number of cattle-owners owing to the system of collecting the fees quarterly instead of annually. The

receipts, however, show a very considerable increase as compared with the previous year. The Collector is taking steps to alter the system. In *South Coimbatore*, the Conservator considers that the revenue realized is small and is capable of considerable expansion, considering the very large area available for grazing in the reserves. In *South Malabar*, there being extensive private forests available for grazing, the limited number of cattle which the villagers keep for agricultural and domestic purposes do not resort to the Government reserves. As regards *South Canara*, the Collector and Conservator agree in thinking that, as there is an ample extent of unreserved land available for grazing, all the reserved forests may be closed to grazing without detriment to anybody.

The number of cattle grazed in the North Coimbatore forests during the year has not been reported. The incidence per head of cattle shows a large increase in Vizagapatam and North Coimbatore. The cause of the increase in the former district is not stated; in the latter, it is due to the reason stated in paragraph 48 *supra*.

50. Grazing was allowed free or on reduced rates in several districts on account of the unfavorable character of the season during portions of the year; and owing to the complete absence of pasture grass even in reserves, ryots were allowed, as a special case, to take the leaves of certain fodder trees in Kistna, Bellary and Salem.

51. In addition to grazing fees, revenue was realized by grazing contracts and by the sale of grass in certain districts shown in Abstract J above. More than half the total receipts under this head were realized in Kistna. A reference as to the crediting of a portion of these receipts to land revenue is under consideration. The system of renting the grazing rights in this district has been long in force, and the renters are bound to levy no more than the authorized rates. The system has given rise to complaints; but the Collector thinks it inadvisable to make any sudden and wholesale change without an increase of staff. The system under which fees are directly levied by Government has, therefore, been very gradually introduced within the past two years and is now in force in thirteen villages. It is undoubtedly the better system of the two, as it avoids the intervention of third persons between the Government and the ryot, and even from a financial point of view, the results will probably be more favorable in the long run. In Nellore, the system of leasing the *Kanchas* (taxed grazing grounds) has long been in force; and a change of system would, it is said, be unpopular.

52. The subjoined statement gives the information called for by Government in Government Order, dated 7th May 1890, No. 314, regarding the area open to grazing in each district and the area from which goats and sheep are excluded:—

District.	Total uncultivated and forest area and area for which returns are not available.	Area of reserved forests and reserved lands.	Area under no restriction as to grazing.	Area in which grazing is free but in which goats and sheep are excluded.	Area in which fees are charged but sheep and goats are not excluded.	Area in which fees are charged but sheep and goats are excluded.	Area in which fees are charged but goats are excluded while sheep are allowed.
	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.
Ganjam	1,225	551	1,197	..	..	362	..
Vizagapatam	1,640	96	1,144	..	51	..	45
Godávari	2,317	1,016	809	516	..	485	..
Kistna	2,342	668	1,483	..	* 256	..	603
Anantapur	2,688	354	2,334	..	..	354	..
Bellary	2,257	414	1,907	..	..	123	..
Kurnool	4,073	1,764	1,575	..	..	60	1,743
Nellore	2,512	591	1,014	217	2	366	..
Cuddapah	5,534	2,024	3,574	169	..	1,786	..
Chingleput	1,081	195	858	..	..	37	186
North Arcot	2,489	912	1,577	..	..	..	912
South Arcot	2,613	801	1,709	..	..	..	792
Tanjore	795	25	764	..	..	..	34
Trichinopoly	1,041	246	1,041	..	..	..	208
Salem	3,366	1,289	2,217	..	..	1,286	..
Madura	1,582	498	956	..	23	* 421	..
Tinnevelly	1,356	589	767	..	..	589	..
Coimbatore	3,425	2,535	956	..	4	..	2,465
Nílgiris	633	385	248	..	..	..	385
Malabar	4,068	602	..	..	..	..	..
South Canara	3,250	1,024	3,140	..	..	..	..
Total ..	50,287	16,579	29,270	902	336	5,869	7,373

* Area of unreserved lands in which fees are charged for grazing.

Several of the Collectors have not yet furnished information regarding the area in which sheep are allowed but goats are excluded. It will be seen that goats are generally excluded from reserved forests and reserved lands, but are allowed to graze without restriction on unreserved lands which amount to about 58 per cent. of the total uncultivated and forest area of the Presidency. Sheep are more liberally treated than goats, and in addition to unreserved lands considerable areas in the reserves are open for their grazing on payment of fees. The area of grazing land to which sheep are admitted amounts to 73·5 per cent. of the total uncultivated and forest area. The Board has, in a separate Proceedings, expressed its opinion that in the present state of forest organization in this Presidency, the existing restrictions on the grazing of sheep and goats will suffice.

53. In its review of the report for 1889–90, the Government of India remarked that information should be furnished regarding the number of cattle grazed per acre in reserved forests open to grazing. This order has not been attended to except in Kistna, Kurnool, Bellary, Nellore and South Arcot. In the first of these districts the information is based on the statistics collected in regard to the thirteen villages where the system of the direct levy of fees has been introduced. In Nellore, the average number of cattle per acre cannot be given until the census of the cattle grazing in the reserves which has been undertaken is completed. The averages, as given by the Collectors, vary so widely, as shown in the margin, as to render the figures valueless. The Board notes with dissatisfaction the omission on the part of the other Collectors to furnish information on this point. It must be fully dealt with in future administration reports.

District.	Number of acres which one head of cattle requires.
Kistna	1·7
Kurnool	9
Bellary	14·4
South Arcot	9·9

54. Consequent on the adverse season in Cuddapah, Nellore, Chingleput, North Arcot and North Coimbatore, ryots were allowed to cut and remove grass free of charge in the forests placed under special fire-protection and closed to grazing. The concession was not, however, availed of in Nellore, where the people lacked the enterprise necessary for the purpose, and in Chingleput where the ryots would not take the trouble to resort to the forests which are at some distance from their villages. In North Arcot it is stated that revenue to the extent of Rs. 3,000 was sacrificed on account of this concession, as the lessees of the grazing rights had to be paid back their purchase money. In North Coimbatore, owing to the want of outside fodder, the people resorted largely to the reserves to cut and remove grass free. In South Malabar and Nílgiris small sums were realized by the sale of grass removed by ryots.

55. *Departmental grass-cutting and hay-making.*—As regards the departmental collection and sale of grass as an alternative to the permission of cattle to graze on payment of fees, Government in communicating the Government of India review on the report for 1889–90 desired that experiments should be instituted by Conservators in places where good fodder grasses grow well to see which system proves the more remunerative and at the same time more advantageous to the cattle of the neighbourhood. The Administration reports received from the Collectors, except those of Nellore and Godávari, contain no information on the point. The Collector of Nellore has reported that the year was not favorable for making the experiments referred to, while the Collector of Godávari does not consider it possible to make any experiments in his district as there is abundance of pasture in unreserved lands. The Conservators will now report what steps have been taken in the matter and with what results. In consequence of the adverse season, departmental collection of hay was made * in Kurnool, Cuddapah, Nellore, Chingleput, North Arcot, South Arcot and Salem. Except in South Arcot, the hay thus collected has, however, not been sold owing to want of demand; and even

* District.	Quantity collected in tons.	Cost.
		RS.
Kurnool	Not given.	4,605
Cuddapah	461	5,331
Nellore	56	554
Chingleput ...	10	64
North Arcot ...	324	3,470
South Arcot ...	About 7.	53
Salem	138 cart-loads.	438

in South Arcot the result of the sale has not been reported. The Board regrets to find that this important subject on which both the local Government and the Government of India laid great stress has not been sufficiently noticed in the District reports. It is hoped that Collectors will deal with it prominently in their future reports.

(e) *Natural Reproduction.*

56. *Ganjam.*—The reproduction of sâl is excellent, as even fires and grazing do no more than keep the seedlings back. In suitable places, *Terminalia tomentosa* and *Lagerstrœmia parviflora* reproduce themselves well and seedlings of *Anogeissus* are numerous on the hill slopes. In Goomsur protection has a marvellous effect on the reproduction of sâl and of other species. On the Mohiri Hills reproduction is unsatisfactory. It is proposed to close one of the three blocks in these hills entirely to cutting and grazing. In the Berhampore range the re-growth of trees is very scarce owing to absence of seed-bearing trees, though the reproduction of grass and shrubs is abundant. The seed put down has not been a success as the seedlings wither away in the hot weather.

Vizagapatam.—The dryness of the year retarded reproduction generally. The sâl (*Shorea robusta*) and bamboo (*Bambusa arundinacea*) have suffered much. In the Peddapalli reserve the reproduction is very satisfactory in consequence of continuous protection.

Godávari.—In the low country an improvement in growth has become apparent in consequence of the closing of the reserves to grazing. In the Yernágudem range, in the reserves placed under special protection, *Terminalia tomentosa*, *Tectona grandis*, *Chloroxylon swietenia and Soymida febrifuga* are coming up; but the teak in Marlagudem does not thrive well, probably because it has been browsed by cattle. In the Kopalli, Kovvada and Papikonda reserves, nothing has come up except bamboos and Konda Tangedu (*Xylia dolabriformis*) owing to annual fires; and the blank spaces (the former podus) are thickly overgrown with coppice shoots coming up from the old stumps.

Kistna.—In the Kondapalle and Kondavid reserves, where there is good growth in consequence of protection, some thinnings are required to improve the growth. In Vinukonda the yepi (*Hardwickia binata*) reproduces itself readily. As the Conservator observes, grazing and reproduction are inimical; and light grazing is a thing really unknown in this Presidency. The District Forest-officer is recording the results of his observations regarding the habits and wants of the more important species of trees as directed by the Government of India in its review of the report for 1889–90.

Anantapur.—Owing to failure of rains natural reproduction in this district proved a failure during the year under report.

Bellary.—In the northern slopes of Rámandrug natural reproduction is good and some thinning is required, both for the benefit of the young growth and of the parent crop. The coppice growth in the compartments where thinning operations were carried out is doing fairly well. In the other ranges of the Sandúr leased forests the reproduction is sparse. There are indications that even here natural reproduction will be fair when the forests are saved from fire and cattle and the rains are more propitious.

Kurnool.—A register of notes on sylviculture has been opened by the District Forest-officer, but many entries were not made owing to unfavorable season. On the Nallamalais the reproduction is good and in the fire-protected blocks of these hills good coppice shoots from stool are growing densely. *Hardwickia binata* has seeded heavily during the year in the district.

Nellore.—The broad-cast sowings of different timber seeds in the Sríharikót forests have not been successful; the seeds germinated, but succumbed in the succeeding hot weather. The experiment of cutting Neredu (*Eugenia jambolana*) roots to increase reproduction was not continued owing to deficient rainfall. The shoots coming out of the roots cut in previous years are said to be growing vigorously. The testing of the coppice growth of the casuarina was not made; of the trees cut in the previous year, five per cent. coppiced and are in a good state.

Cuddapah.—Except in two places in the Balapalli working circle, the *Bambusa arundinacea* seeded all over the district. It has not been ascertained, or reported, whether, in these two localities, the fellings and thinnings of the bamboo had anything to do with its non-seeding. In one place, the bamboos were cut up into three-foot lengths and planted on the sides of a path to serve as a fence; when the shoots were four feet high, they seeded as did also the parent culms. The District Forest-officer concludes that this instance shows how all the bamboos of one clump, however separated, seed at one and the same time. The drought has killed a large number of trees and seedlings. The coppice growth in Balapalli working circle is said to be progressing favorably.

Chingleput.—In the plain forests, owing to the unfavorable season experienced, natural reproduction has been a thorough failure. In the Pulrambakkam reserve, reproduction from seed and coppice from Babul stools has not been satisfactory. In the semi-evergreen forests of Kambakkam, notwithstanding fairly good protection, natural reproduction is slow and backward. In the Nagalapuram hills reproduction of bamboos from seed is promising.

North Arcot.—Natural reproduction continues to be most discouraging, chiefly owing to over-grazing and reckless cuttings. In Mr. Marshall the district now possesses an energetic Forest officer who will, it is hoped, do his best to improve matters. In the dry *Acacia amara* tracts of Gudiyátam, Palmanér, Vellore and Chandragiri, reproduction is absolutely *nil* and neither a seedling nor advance growth is to be found. Owing to reckless fellings laying the ground bare and owing to over-grazing, the few seeds which germinate during the rains are destroyed by the heat in the succeeding hot months. In the Karnatieghur block which has been under protection for many years, reproduction has not been successful, chiefly because the rank growth of grass, which is the invariable result of protection in a forest like this which is not evergreen and has a very interrupted leaf canopy, kills out the seedlings. The advance growth in the out-of-the-way Javadi villages is very fair. *Bambüsa arundinacea* and *Dendrocalamus strictus* have seeded throughout the Lower Javadis and the reproduction has been very satisfactory. In the Napier reserve, which is closed to grazing, it is hoped that the reproduction will be good. In the Napier, Mamandur and Mamandur Extension reserves, the reproduction of red sanders (*Pterocarpus santalinus*) and satinwood (*Chloroxylon swietenia*) is very fair; but even here it is stated that what appear to be seedlings are really only coppice shoots from a gnarled and bulbous-looking stock. The regrowth in the coupes of 1889, 1890 and 1891 is excellent and seedling reproduction is also fair, but very patchy. Three blocks on the Javadis which have not yet been reserved were fenced with bamboos to ensure protection from cattle and to foster reproduction of sandalwood trees. The results, however, were not satisfactory, as the season was exceptionally unfavorable.

South Arcot.—Owing to want of timely rains, natural reproduction in the Tiruvannámalai range was not satisfactory. On the plateaus and slopes of hills it was fair, as were also the coppice shoots in the coupes of the *Acacia* and *Eugenia* species which were cut over. In the Villupuram range reproduction in the specially protected areas was satisfactory. The reproduction of *Chloroxylon swietenia* was very promising in the natural forests in the uplands in the early part of the year; but, owing to the bad soil and the continued hot season, most of the seedlings died. The *Pterospermum suberifolium*, one of the winged seed species, has given fair result in the Adivarahanallur and Kondapuram forests. Avaram (*Cassia auriculata*) reproduced profusely, especially in abandoned fields and areas subjected to felling. Coppice from old stools of *Eugenia jambolana* in the Kondapuram forest was very satisfactory.

Tanjore.—Reproduction of various species of trees from seeds as well as the coppice growth of casuarina is reported to be satisfactory.

Trichinopoly.—Reproduction from seeds of various trees on the Pachamalais and in the Udayárpálaiyam forests was good and the coppice growth in the Sarupamalais and Panjamtangi hills is reported to be satisfactory.

Salem.—Owing to the excessive drought which necessitated excessive grazing, natural reproduction has not been good.

Madura.—The coppice growth in portions of the Alagar hill reserve is decidedly good. The growth on the slopes of the hill facing Madura is remarkably slow,

though no fires enter and no cattle graze there; the slow growth is the result of reckless felling in former days, resulting in the disappearance of the surface soil and of the seed-bearing trees. The teak-growth in a part of the Alagar hill and in Waguthumalai is improving. In part of the Kuduraiyar reserve, a very good growth of young teak is springing up. In the southern slopes of the Palnis, in the lower portion of the Perumalmalai and elsewhere, the improvement resulting from protection is undeniable.

Tinnevelly.—In the plains, the reproduction of Avaram shrub (*Cassia auriculata*) is good, but it is much cut over by ryots and requires protection. In consequence of rigid protection, several jungle shrubs are coming up well in the reserves. In the coppice coupes at the foot of the ghâts, *Albezzia lebbek*, *Anogeissus*, *Tectona grandis* and *Pterocarpus marsupium* are found shooting up, straight and fast-growing, when the stools are cut flush with the ground. The teak does not grow from seeds though it coppices well, as the seeds that germinate die in the hot weather. In the evergreen forests in the upper hills, the natural reproduction from seed is abundant, but the undergrowth is merely of the commoner species of junglewood. Wherever there is a little light, seedlings of the better species are also found, but in many places they are choked by baser growths.

North Coimbatore.—Natural reproduction is bad as all forests were open to grazing. The cause of this has not been stated by the Collector and must be explained.

South Coimbatore.—In the Sholakarai range the coppice reproduction, and in the coupes felled over the seedling roproduction, of teak, resewood and vengai continues to be good. In the hill forests natural reproduction has been decidedly bad owing to the rank undergrowth; it is only here and there that any "advance" growth of the more valuable species is found. The results of the experiments said to have been made by Mr. Porter on the Anamalais and specially referred to in the report for 1890–91 have not been reported.

Nilgiris.—The coppice growth of *Australian Eucalyptus* and wattles has been as usual excellent. In Sigur, the reproduction from sandalwood is fairly satisfactory. In Benne and Mudumalai, teak, vengai and rosewood seed well; but the plants are over-powered by the rank grass. By improvement fellings and cultural operations steadily conducted, it is hoped that these reserves can be stocked with seedlings. The subject is engaging attention.

North Malabar.—Natural reproduction continues to be very unsatisfactory. The Conservator considers that the reproduction of teak from seed can be secured by partial preparation of the ground and by protection from fire in selected compartments.

South Malabar.—In the Nellikóta and Karumpoya reserves there is a fair seedling growth of *Lagerstræmia microcarpa* and *Dalbergia latifolia* and coppice growth of *Terminalias* and *Tectona grandis*, the result of successful fire-protection since 1883. The Chenat Nair reserve has been successfully fire-protected for the past seven years, and the seedling growth is satisfactory. In the Walayar reserve worked under the coppice with standard system, the coppice growth is excellent.

South Canara.—The Collector says that he has nothing to add to the information furnished in paragraph 18 of the Southern Circle Report for 1890–91 and that the Range officers have furnished no information on the subject. The Board notes the omission with dissatisfaction. It must not be allowed to recur.

57. From the foregoing remarks, it will be seen that the results under this head are generally encouraging, and that District Forest-officers have given a fair amount of attention to this important subject. The season has interfered with reproduction in a few districts; but there is every reason to expect that with more propitious rains, with better protection from fire and grazing, and with an increased staff of subordinates, the results will be satisfactory in future years.

58. Only a few District Forest-officers appear to have made systematic notes of the habits and wants of the principal tree species. Their attention is once more drawn to this point which the Board regards as one of primary importance.

(f) *Artificial Reproduction.*

59. The subjoined abstract shows the area under plantations, topes and cultural operations, together with the cost incurred during the year, in comparison with the figures of 1890–91 :—

Abstract K.—Plantations, topes and cultural operations in other areas.

—	Plantations.								Topes.			
	Up to 1890–91.		Added during				Total.		Up to 1890–91.		Added during	
			1890–91.		1891–92.						1890–91.	
	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Northern Circle	876	31,505	33	2,696	25	2,593	934	36,794	3,514	17,070	3	1,246
Central ,, ...	12,570	6,33,521	106	18,601	750	21,563	13,426	673,685	7,866	343,403	43	4,284
Southern ,, ...	6,118	4,31,697	157	18,511	124	12,622	6,399	462,830	14,363	56,185 —1,344	..	4,436
Grand Total ..	19,564	10,96,723	296	39,808	899	36,778	20,759	11,73,309	25,743	415,314	46	9,966

—	Topes—*cont.*				Other areas.							
	Added during—*cont.*		Total.		Up to 1890-91.		Added during				Total.	
	1891-92.						1890-91.		1891-92.			
	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.
	14	15	16	17	18	19	20	21	22	23	24	25
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Northern Circle	..	1,204	3,517	19,520	..	1,741	412	2,559	10	1,688	422	5,988
Central ,, ...	2,577	4,661	10,486	352,348	3,582 *100	38,933	182	1,789	67	2,143	3,831 *100	42,865
Southern ,, ...	159	2,287	14,522	61,564	1,792	10,473	169	2,486	211	1,995	2,172	14,954
Grand Total ..	2,736	8,152	28,525	433,432	5,374 *100	51,147	763	6,834	288	5,826	6,425 *100	63,807

* The figures here refer to "running miles"; the area is not given.

	ACRES.
* Nellore	100
South Arcot	50
Tanjore	600
South Malabar	100

The principal additions to plantations during the year were in Nellore, South Arcot, Tanjore and South Malabar.*

	ACRES.
† North Arcot	2,556
South Coimbatore	154

The increase under topes, notably in North Arcot†, is the result of a more accurate estimate of the area. In South Coimbatore † the area of seventeen topes omitted in previous years was added during the year under report.

Under cultural operations, the only districts worth mention are Nellore, where forty acres in the Sríharikót forest, and Tinnevelly, where 207 acres in the Kudiraimoliteri, were sown with various seeds.

The progress of planting and cultural operations in each district is noticed below.

Ganjam.—Seeds of various species were put down in the reserves on the plains and ten acres in the Napier reserve were planted with fruit trees.

Vizagapatam.—The only operation undertaken during the year under report was the sowing of palmyra seed along the boundary of the Peddapalli reserve in Sarvasiddhi taluk. It was not successful as the seeds perished for want of rain.

Godávari.—There are two plantations in this district, viz., Bandamurlanka and Narsápur; six acres in the former and four acres in the latter were newly planted with casuarina, and a number of plants were transplanted. The results are said to be satisfactory.

Kistna.—Casuarina and Neredu seedlings were planted in the plantations of the Bápatla range and in the Kanukollu and Weld reserves. A large quantity of babul-seed was sown broadcast in the Gannavaram reserve. Almost all the plantations were prejudicially affected by the want of rains. In Bezváda reserve, block No. I, margosa, tamarind, *Albizzia lebbek* and soapnut seedlings were planted at a cost of Rs. 659.

Anantapur.—Sowings of indigenous trees in the Kojjapalle forest were attempted, but owing to the extreme drought, all except a few Tangedu plants perished.

Bellary.—In the Shivapuram reserve, tamarind seeds were sown, but did not come up on account of the long drought.

Kurnool.—No plantations and no cultural operations were undertaken during the year.

Nellore.—The casuarina plantations at Dugarázapatnam and Kottapatam were extended by fifty acres each. Heavy casualties having occurred for some years, owing to the attacks of a borer, the importation of fresh seed from Australia as a remedy is under consideration. There are 100 acres of date plantations at Allipuram and Sríharikót. Even here the casualties were numerous; but the reason assigned, viz., want of rain, is untenable, as dates do not require a heavy rainfall. Many of the topes have not as yet been brought under the Forest department. Steps are being taken to take over such of them as are worth having. Seeds sown in nursery beds were afterwards transplanted in the Sríharikót forests. There were many casualties among them.

Cuddapah.—The Red sanders (*Pterocarpus santalinus*) is growing well in the Kódúr plantation, although during the year under report the growth was below the average. A number of seedlings were planted out from the Ballapalle nursery. The date seedlings planted in Reddipalli have suffered seriously from the bad season. The teak plantation at Santhakovu stood the drought well; mahogany is struggling on, but will not succeed in the shallow soil of the hill sides; and even in the Ballapalli nursery, where the soil is better, the trees grow weedy and do not look healthy. The large planting of palmyra on the river bank at Kamalápuram is promising. *Acrocarpus Fraxinifolius* is specially suited to this district. It does well at all elevations from 400 to 4,000 feet. It was planted out on the Horsleykonda slopes, but owing to want of rain 50 per cent. of the seedlings died.

Chingleput.—In the Meyur casuarina plantation, 10,106 seedlings and 10,036 trees died out. They were replaced by 12,777 fresh seedlings from nurseries. Seeds of *Acacia planifrons* were obtained from Tinnevelly and "dibbled" over many of the reserves in the plains; but very few germinated owing to want of rain and even these few died out in the hot weather. Three topes which were found to have been previously omitted have been added to the list.

North Arcot.—216·95 acres of casuarina plantation were replanted and blanks in the previous year's plantings filled up. The total number of plants put out was 240,750 of casuarina and 6,480 of *C. Siamea.* The plantings have been most successful, notwithstanding the drought. Owing to careful supervision and to the change from felling by contractors to departmental fellings, the revenue has increased from Rs. 35 in 1889–90 to Rs. 223 in 1891–92 per acre. Palmyra seeds were sown in the Tiruvallam plantation and Sátúr reserve where casuarina will not grow and it is expected that the majority of them will germinate. Nurseries of bamboos, avaram, teak, konnai, &c., were also formed in various places and the experiment was decidedly successful. The Collector considers that broadcast sowing is waste of time and money and that seeds should be sown in hollow patches on contour lines sloped inwards. Bamboos having innumerable enemies in partridges, mice, junglefowl, &c., require to be planted out in pits from nurseries.

South Arcot.—Fifty acres were planted with casuarina during the year in the district and several failures replaced. *Avicennia litoralis* seeds were sown broadcast in the Shonankuppam. They germinated, but most of the seedlings died for want of moisture; in the same plantation, palmyra seeds were "dibbled" on compartment lines. The cashew seedlings (*anarcardium*) raised by cultural operations in the Periyakuppam coast-plantation are in fair condition. In the Tindivanam range, the sowing proved unsuccessful on account of the unfavorable season.

Tanjore.—In the south casuarina plantation in the north range, a number of seedlings were watered during the year. The cashew plants at Nadur and Ovelikudi, and the pinnei (*calophyllum inophyllum*) plants in the Maltotam west block, all in the south range, that germinated in 1890–91, are reported to be healthy. Casuarina seedlings were also planted in some of the reserves in the south range and those that survived the dry season are doing fairly well.

Trichinopoly.—Six acres of gaps in the *padugais* (river margins) of the Coleroon and seven acres of the Cauvery plantation in Kulitalai range were planted with casuarina.

Salem.—There are no plantations in this district.

Madura.—The acacia plantation at Kodaikánal was sold in 1891–92. The rainfall was unseasonable and unequally distributed. A severe and unexpected frost took place in November which injured many of the plants.

Tinnevelly.—Wodai (*Accacia planifrons*) mixed with castor-oil seeds, cotton and green pea and babul seeds were sown in 1891–92. Most of them germinated, but died on account of the heat of the sun; they are, however, expected to come up again under the influence of the recent rains. The sowings of 1890–91, noticed with interest by the Government of India in its review of the last Forest Administration Report suffered considerably but have since recovered owing to subsequent rain.

North Coimbatore.—The only plantation in this district is the Bylur sandal plantation in the Kollegál range which contains 34,400 sandal trees. It was watered and weeded out during the year at a cost of Rs. 381–6–0, and a rain-gauge was set up to register the rainfall.

South Coimbatore.—Teak, rosewood and vengai (*pterocarpus marsupium*) seedlings, to the extent of about a hundred thousand, were raised in baskets and transplanted in the blanks of the forests of every range. The Conservator thinks that the planting should have been confined to selected compartments in which the casualties could be better determined. The Board agrees with the Conservator.

Nilgiris.—A sandal plantation (23 acres in extent) in Northern Hay reserve, which was struck off the list by Mr. Gamble, was found much neglected and injured by fires. As it appeared worthy of protection, it was brought into the return during the

year under report. The growth in the Mudumalai and Benne plantations is slow compared with that of trees of a similar age in Nilambúr; the climate is not so favorable nor is the soil so rich. The Collector considers that the policy of planting teak in the Benne forest should be maintained. The Eucalyptus plantations on the plateau continued to make satisfactory growth. Cultural operations were carried out over $3\frac{1}{2}$ acres in the ghât reserve and gaps and casualties filled up in some of the other reserves. In the Benne teak forest and in the Barliyár block in the Coonoor range, cultural operations have been commenced and all the worthless and crooked trees were cut out and a nursery formed for raising seedlings to be eventually planted out; 3 lb. of mahogany (*Swietenia macrophylla*) seeds were received from Nilambúr and sown, and seeds of teak, vengai and rosewood collected. Beds of *Acrocarpus fraxinifolius* have also been planted and some of the seedlings have been basketed. In Barliyár, a new nursery has been formed and seeds of various species were planted.

North Malabar.—Seeds of various trees were sown broadcast and some were "dibbled" in the Kanoth range.

South Malabar.—The planting of teak with mahogany standards was continued and the sixth block of 100 acres in the Nilambúr plantation was planted on the site of the previous year's felling with 125,946 teak, 1,252 *Swietenia macrophylla* seedlings and 159 date plants raised from Egyptian seeds. There were about 11,423 casualties of teak seedlings which were immediately replaced. Blocks I to V were also maintained; the growth in all these is as good as usual. 818 *Swietenia macrophylla* and 318 Egyptian date plants were also planted in blocks I to V of the same plantation and 466 ipecacuanha plants in Irivillikava plantation had to be transplanted and manured. In Wálayár reserve also, the *Swietenia macrophylla* plants were put out. The *Macrophylla* standards in block V of Nilambúr plantation proved equal to the teak, but though they were exempt from the attacks of the borer, they had a new enemy in the sambhur which either nibbled the tender shoots or broke the stems by rubbing against them. To protect the plants against this, each plant had to be fenced round with bamboo thorns. Out of the 1,200 standards in this block, 308 were coppiced being damaged by sambhur and 411 were completely destroyed. The former are expected to throw out a satisfactory regrowth and the latter will be replaced in the next season. Twelve pounds of *Swietenia macrophylla* seeds were received from the Royal Botanical Gardens at Calcutta and were distributed as follows:—

6 lb. to the District Forest-officers, Nílgiris and South Coimbatore;
1 lb. to be planted at Dhoni in Pálghat; and
5 lb. to be sown in Nilambúr.

The seedlings raised from the last will be planted out in 1892–93 in the seventh block for which an area has been felled and kept ready.

South Canara.—The operations in this district were petty and call for no remark.

Care should be taken in future reports from all districts to add the botanical equivalent whenever the native name of a tree is used.

(g) *Works of Improvement.*

60. In *Ganjam*, creepers were cut over 810 acres at a cost of Rs. 1–14–8 per acre. In *Godávari*, the thorny undergrowth and crooked trees in the Devancheruvu reserve were removed. In *Kistna*, prickly-pear was removed from the plantations in the Bandar range; but creeper-cutting was not carried out, as the Range officers were otherwise engaged. In *Cuddapah*, creeper-cutting was carried out over 74 acres in the Balapalli working circle at a cost of Rs. 69. In *North Arcot*, thorns and creepers were cut over an area of 50 acres in the Karnaticghur reserve and prickly-pear removed in Vannivedu plantation and in a few reserves of the Wálajápet taluk. Pruning and cutting of prickly-pear were carried out in *South Arcot*. The use of the scrub exterminator in this district proved fruitless in rooting out prickly-pear. Weeding, fencing and cutting of creepers and prickly-pear were carried out in the *Trichinopoly* district, and in *Salem*, *Madura*, *Nílgiris* and *North Malabar* the clearing of undergrowth and prickly-pear was carried out in several reserves. In the teak plantations of *South Malabar* weeding, pruning, parasite-clearing and thinning were carried out at a cost of Rs. 4,086.

61. *Fencing.*—In *Ganjam*, the Chatrapur reserve was fenced with screwpine, but owing to the failure of the north-east monsoon, a good deal of the work will have to be done over. In *Godávari*, a portion of the Ramasaram reserve was fenced. The Bezváda reserve in *Kistna* was not fenced, but the existing fences were repaired in this district as well as in *Cuddapah*. In *Anantapur*, 1,220 yards of babul fencing were put up round the Pamidi reserve at a cost of Rs. 30–8–0 and 480 yards of aloes round Upparapalli reserve at a cost of Rs. 5–10–0, and a wall was built round the Kalyandrug and part of Boodikonda reserve by famine labour. The adjustment of the actual expenditure has not been made during the year. In *South Arcot*, a fence of 400 yards in length with stout stakes of casuarina and a row of wild croton (*Jatropha curcas*) was constructed in Shonankuppam to prevent the inroad of cattle. A groin of 480 feet in length was constructed in the same plantation to prevent erosion by floods. A portion of the Bargur forest in *Salem* was fenced and signboards were put up in a few other reserves. A wire fence was put round the Ullal casuarina plantation in *South Canara* to prevent ingress of cattle.

62. *Improvement thinnings.*—In *Bellary*, about 200 acres were thinned out in the sixth compartment of the Rámandrug range partly by departmental agency and partly by contractors. The yield is valued at Rs. 510. The coppice shoots of *Hardwickia binata* were thinned out in 100 acres of Chiribi reserve, leaving only straight and strong shoots. The cost of thinning, &c., was Rs. 21 and the revenue realized Rs. 90; the net profit is thus 11 annas per acre Ten acres were cleared on Horsleykonda in the *Cuddapah* district at a cost of Rs. 10 and in the Thanakonda reserve, badly grown trees were cut back over 40 acres, and the wood was supplied to the Madras Railway as fuel. In *North Arcot*, all fellings have been localised to clearly defined coupes. No timber has been touched except such small stuff as may be found in the coupes exploited. A selection felling of 600 trees was made in the Karnatieghur reserve to test the market and the wood sold at a profit of 90 per cent. upon cost of cutting, transport and supervision. An area of 85 acres in Musalimadugu, Santavasal and Attimur coupes was felled under the improvement felling system; the coppice regrowth has been excellent. Another area of about 100 acres was felled under the clean felling system in the Ambur fuel reserve. In the Napier reserve, impovement fellings or heavy clearings were adopted according to the requirements of the compartments. In *Tanjore*, 50 acres of natural forest in the Vettangudi forests were felled on contract on the lines of the coupe system. In the *Nílgiris*, 23 acres were thinned in the Marlimund, Snowdon and Sheffield plantations and the net profit was Rs. 122. In the Bleak House plantation 9 acres of thinnings yielded a profit of Rs. 59. Fifty acres thinned in the Mudumalai reserve yielded a profit of Rs. 1,243 by the sale of teak, vengai and other poles. The improvement fellings at Burliar could not be undertaken owing to the market being full, the roads being damaged by floods and the wages having risen in consequence of the demand for labour by the Railway Company.

63. The District Forest-officers being as yet mostly employed on settlement, selection and other important preliminary labour, sufficient time has not been devoted to this important work. The Board has, however, not lost sight of the instructions of the Government of India on the subject, and the report for the year under review shows that more attention was accorded to it than formerly.

(h) *Experiments and Exoties.*

64. The progress made in experiments with exotics, &c., is detailed in Appendix B.

(i) *Communications and Buildings.*

65. The subjoined table shows the outlay on communications and buildings during the past two years:—

	1890–91.	1891–92.
	RS.	RS.
Roads and bridges	30,410	30,796
Buildings	37,748	38,035
Other works	782	3,666
Total ...	68,940	72,497

66. The percentage of the total outlay on roads and buildings during 1891–92 to the gross revenue was 4·2 against 3·8 in 1890–91. As in the previous year the outlay on buildings exceeded that on roads, as recently remarked by the Government of India in reviewing the Board's Forest Report for 1890–91. The proportion should be the other way and the attention of Collectors and Conservators has recently been drawn to this point. Information has also been called for with a view to checking outlay on forest bungalows where public bungalows or other halting places are available.

67. The following notes give a summary of the principal works executed during the year:—

Roads.

Ganjam.—The Gullery-Rambha road was completed during the year. Lack of range officers prevented further progress in road-making.

Godávari.—The Jiruguppa-Ramdeopeta and Murmur-Tatlunka roads were taken up, of which $7\frac{3}{4}$ miles were constructed during the year. As roads are badly wanted in Rampa as remarked in Board's Proceedings, dated 23rd August 1892, Forest No. 458 (paragraph 14), their cost may reasonably be charged to the Forest department which would thereby, with the completion of the East Coast Railway, largely increase its timber market, and expenditure under this head is very desirable. Government has been asked to place a special officer at the Agent's disposal for this purpose.

Kistna.—The Venkatayapalem road and two roads in Naralapuri and Kondapalli reserves were under construction. Two roads in Kakirela and Vinukonda reserves were cleared at the cost of the Local Fund Board.

Anantapur.—Two miles of road from Ganjanapalle to Vengalamma cheruvu were cleared and four miles of road from Bukkapatnam to Konnapanayanipalli bungalow were made.

Kurnool.—The Mahanandi road was completed and portion of the Siddapuram-Velgode road was constructed during the year.

Cuddapah.—The principal work undertaken was the bridge over the Peddagadi stream and the road leading to it. They were not fully completed owing to the default of the contractors. In Chingleput no new roads were made; the Kambakkam hill road was repaired during the year.

South Arcot.—The Tenmalai ghât road was nearly completed, but it was damaged directly after by the rains of August, September and October 1891.

Salem.—A road in the Alangayam reserve and another from Anchetty to Kundrakottai in the Hosur range were opened at a cost of Rs. 750.

Madura.—Two bridle-paths and a cart-track in the Alagar hill and a portion of the bridle-path from Kodaikanal to Bombadi shola were completed.

Tinnevelly.—The completion of Sengalteri-Kariar bridle-path, the tracing of the Mundanthorai road, the conversion of Kattanthari bridle-path into a cart-track, the construction of a road from Ottapuli to Kannagudimalai and of a bridle-path from Kansapuram hills to Virasadikidai were the principal works done during the year.

South Coimbatore.—The ghat road was metalled and twelve bridges were constructed during the year.

Nilgiris.—The cart-road in the Aramby reserve was extended by 4 furlongs and metalled at a cost of Rs. 344, and a new road 3 miles 2 furlongs in length was constructed from the southern boundary of the Mudumalai forest to join the Benne-Mudumalai road.

North Malabar.—A new road from Kanoth to Peruvayal was constructed.

South Malabar.—About a mile of the compartment road in the new teak plantation was opened.

In most of these districts minor sundry repairs were also executed to existing roads.

In Vizagapatam it is stated that no roads will be required until the forests are brought under more systematic control.

In North Arcot the old forest roads are said to be almost impassable and not worth repairing. It is in contemplation to make new roads after demarcation is completed.

In future the length of every road constructed or repaired should be given in the district administration reports.

Tramways.

68. Three and a half miles of tramway plant were received for the Cuddapah district in January 1892, but were not used, as there was no felling. A permanent-way for one mile was made, as the line is intended to be used for the next ten years and the rails were laid down.

In Nellore, the success of the line at the casuarina plantations has been established beyond doubt, but that of the line at Sriharikota remains to be established. The results of the former line would have been better had the full capabilities of the tramway been utilized, which was not the case owing to the dullness of the market. At Sríharikóta the quantity of wood which is at present possible to carry is not sufficient to cover the charges of transport by the tramway, and to make the working financially successful, additional wagons have been indented for.

In North Arcot, the results of the working of the Virinjipuram tramway have been calculated by Mr. Leighton, of Messrs. Leighton and Co., whose services were utilized by the Collector for the purpose. The statements prepared by him are printed in Appendix C. The loss in this line is due to the fact that the quantity actually transported over it was only a fourth of the quantity which it is capable of carrying, and this again is largely accounted for by the fact that the plantations having been exhausted, no work was done for three months. The tramway in South Coimbatore was extended and a sum of Rs. 1,300 spent in repairing the old line.

Canals.

69. In Kistna, a canal was dug at a cost of Rs. 759 in Lankavánidibba reserve for transporting mangrove wood from the forests in the Bápatla range.

In South Malabar, a channel 320′ × 12′ × 6′ was dug at a cost of Rs. 109 to admit of the timber rafts approaching the Kallai depôt.

Buildings.

70. No large buildings were taken on hand during the year under report, but numerous rest-houses, range houses, inspection huts and guards' huts were constructed in most districts. In North Arcot, a large amount of repairs were executed and it is said that every rest-house in the district is now in excellent repair. In Kurnool, three railway rest-houses at Chelama were purchased at a cost of Rs. 1,300 and subsequently improved. A considerable outlay was also incurred in repairing existing buildings. In Tinnevelly, the Forest-officer's bungalow at Mandanthorai, which was completed during the year, was burnt very soon after its completion. A list of the completed forest buildings in the several districts is given in Appendix D.

Boats.

71. In Godávari, the District Forest-officer's boat was repaired at a cost of Rs. 12, and a small boat for the use of the forest guard at Upputeru was purchased for Rs. 35.

In Nellore, one of the ferry boats became useless and is intended to be sold in public auction.

CHAPTER V.

YIELD AND WORKING.

72. The total quantity of timber and other produce cut and removed during the year is shown in the subjoined abstract:—

ABSTRACT M.—Comparative yield as per forms 69, 72-A and 72-B.

	TIMBER IN CUBIC FEET, INCLUDING SANDALWOOD.		FUEL IN CUBIC FEET.		BAMBOOS IN NUMBER.		MINOR PRODUCE—GROSS VALUE IN RUPEES.	
	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9
By Government Agency	337,111	(a) 266,546	2,112,312	(b) 1,806,320	179,573	62,352	(c) 64,118	(c) 45,051
By purchasers (including confiscations)	3,424,712	2,722,596	10,055,503	12,179,502	18,007,907	31,035,500	(c)5,93,491	(c) 5,95,158
Free grants ..	40,674	97,795	400	1,351	35,967	80,213	702	633
Total ..	3,802,497	3,086,937	12,168,215	13,987,173	18,223,447	31,148,065	6,58,311	6,40,842
Increase or decrease in 1891-92 as compared with 1890-91.	..	— 715,560	..	+ 1,818,958	..	+12,924,618	..	— 17,469
Percentage of increase or decrease over the previous years total ..	..	— 19	..	+ 15	..	+ 71	..	— 3

(a) Includes 1,498 cubic feet, being excess found on remeasurement of timber and sandalwood collected and taken to depot in previous years as per form 70.
(b) Includes 588 cubic feet, being excess found on remeasurement as per form 70.
(c) Includes grazing fees.

Note.—The value of minor produce given above is that of the quantity *disposed of*, not that of the quantity *collected*, as the value of the latter is not known.

From the above, it will be seen that the removals of timber and minor produce during the year are less than those of 1890–91. The causes of this decrease are explained in paragraphs 75, 78 and 82 below.

The average yield of material per square mile of forest area during the year was 954 cubic feet of timber and fuel, 1,742 bamboos and Rs. 36 worth of minor forest produce, as against 896 cubic feet, 1,022 bamboos and Rs. 37, respectively, in the preceding year.

Section I.—Departmental operations.

73. The number of trees felled under the system of selection fellings and those converted into logs or scantlings during the year is shown in the following abstract, along with similar information for 1890–91 :—

ABSTRACT N.—Trees felled and converted.

Years.	Balance on hand at the beginning of the year.	Number of trees felled during the year.	Total.	Converted into logs, &c. during the year.	Balance on hand at the end of the year.
1890-91	937	28,437	29,374	28,894	480
1891-92	(a) 479	27,022	27,501	26,293	1,208

(a) Excludes one tree erroneously included in previous year's return

There is a falling off in the total number of trees felled which occurs mainly in Ganjam (2,060) and Godávari (12,254). The decrease in the former district is due to the stoppage of departmental fellings which had been undertaken without sanction. In Godávari it is stated that, as the trees felled in the Bhadráchalam range in 1890–91 could not be sold owing to absence of demand, a smaller number was felled during the year under report; and also that in this district departmental felling was stopped and trees were sold standing. Against this decrease is to be set an increase in certain districts, notably in Kistna (1,269), Bellary (1,997), North Arcot (2,770) and Nílgiris (7,013). The increase in Bellary is said to be due to a large number of trees having been felled in the Rámandrug range by improvement thinnings. In the Nílgiris it was the result of the felling of a block left unfelled in the previous year in addition to the felling provided in the working plans for the year under report. In North Arcot, contractors were not allowed to cut trees for want of proper supervision, and hence the departmental fellings increased. The increase in Kistna has not been explained.

74. The following abstract shows the total statistics of timber and other produce cut, collected and disposed of by the department in 1890–91 and 1891–92:—

ABSTRACT O.—Produce collected and disposed of (Forms 69 and 71).

Produce collected.	During 1890–91.			During 1891–92.		
	Quantity.	Cost.	Average.	Quantity.	Cost.	Average.
1	2	3	4	5	6	7
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber in cubic feet ..	334,298	63,143	0 3 0	(a) 261,420	45,981	0 2 10
Fuel in cubic feet ..	2,112,312	80,962	0 0 7	(b) 1,806,320	70,437	0 0 7
Bamboos in number ..	179,573	1,635	0 0 2	32,352	1,034	0 0 6
Sandalwood in cubic feet.	2,813	2,656	0 15 1	(c) 5,126	4,971	0 15 6
Minor produce in maunds of 25 lb. ..	59,232	34,593	0 9 4	(d) 184,404	41,276	0 3 7
Total ..	..	1,82,989	..	..	1,63,699	..

Produce disposed of.	During 1890–91.			During 1891–92.			Stock on 1st April 1891.	Stock on 31st March 1892.
	Quantity.	Sales.	Average.	Quantity.*	Sales.	Average.		
	8	9	10	11	12	13	14	15
		Rs.	Rs. A. P.		Rs.	Rs. A. P.		
Timber in cubic feet ..	336,655	1,53,995	0 7 3	389,808	1,66,936	0 6 10	362,980 † 30,610 (e)— 562	264,640
Fuel in cubic feet ..	2,134,553	1,63,619	0 1 2	1,833,591	1,22,049	0 1 1	938,076 (e)—15,989	894,816
Bamboos in number ..	156,352	4,872	0 0 6	45,867	1,312	0 0 5	45,029	31,514
Sandalwood in cubic feet	3,963	30,269	7 10 2	4,183	40,957	9 12 7	885	1,828
Minor produce in maunds of 25 lb. ..	64,226	64,118	0 15 11	36,548	45,051	1 3 8	10,065	157,921
Total ..	..	4,16,873	..	..	3,76,305	..	..	..

(a) Includes 1,268 cubic feet found in excess in the depôts as per form 70.
(b) Includes 588 do. do. do. do.
(c) Includes 230 do. do. do. do.
(d) Includes 39 maunds do. do. do.
(e) Quantity shown in excess by mistake in 1890–91.
* Includes that used departmentally, written off, &c., as per forms 69 and 70.
† Stock not accounted for in previous year's returns.

The foregoing abstract shows that the quantity of timber and fuel cut and collected was less than that of the preceding year by about 73,000 cubic feet and 300,000 cubic feet, respectively.

75. The decrease under *timber cut and collected* occurs mainly in Godávari, Cuddapah and South Malabar. In the first-named district it is due to the suspension of the felling of teak owing to the large accumulations of previous years. Absence of demand for redwood roots accounts for the decrease in Cuddapah; that in South Malabar has not been satisfactorily explained. The total decrease under this head has been partially counterbalanced by an increase in certain districts, notably in Ganjam, North Arcot, Tinnevelly and South Coimbatore. In North Arcot and South Coimbatore this is apparently due to the larger number of trees cut departmentally. The increase in Ganjam and Tinnevelly has not been explained.

Disposals of timber show an increase, chiefly in Ganjam, North Arcot and South Malabar, which was brought about by the sale of large quantities of wood cut in previous years and by the supply of a large quantity of casuarina poles to the Kolar gold fields and to the Telegraph Department from the North Arcot district. There was, on the other hand, a considerable decrease in Godávari, Cuddapah, South Coimbatore and Nílgiris. In the two former districts the falling off is due to the decrease in the quantity of timber collected, which has been already explained; in the two latter it is attributed to difficulty in obtaining labour to transport the logs from the forests and absence of demand for the stock on hand.

76. Under *fuel*, there was a large falling off in Ganjam, Kurnool and South Arcot. In Ganjam it was found that departmental felling of fuel resulted in great loss and it was stopped accordingly. In South Arcot there was delay on the part of the South Indian Railway Company in taking delivery of the wood supplied and difficulty in procuring reasonable offers for green wood. The substitution of coal for firewood on the railways has seriously affected the supply of fuel in Kurnool. These decreases were, however, partly counterbalanced by improved demand for wood in Nellore, Cuddapah, North Arcot, Trichinopoly, Tinnevelly and Nílgiris, from the last of which district a large quantity of fuel was supplied to the Railway and Commissariat Departments.

77. Under *bamboos*, there is a very large decrease, which occurs chiefly in Anantapur, Bellary, Madura and South Malabar. The Collectors of the three former districts have not explained the falling off. They are now requested to do this. In South Malabar it is stated that bamboos are cut for making rafts for transport of teak saplings, and that as the number of saplings cut in 1891–92 was very small, the number of bamboos also fell proportionately.

78. *Minor produce* includes 150,386 maunds of hay collected in Kurnool, Cuddapah, Salem and North Arcot at an aggregate cost of Rs. 13,842, or about 1½ annas per maund of 25 lb., to provide fodder for cattle. Eliminating these transactions which were due to the abnormal state of the season, the balance shows a decrease as compared with the preceding year, which occurs mainly in Bellary, Nellore, Cuddapah and South Canara. In the first three districts it is due to the season having been unpropitious. In South Canara no adequate explanation has been furnished by the Collector.

79. It is satisfactory to note that the cost of collecting timber has slightly decreased. The large increase in the rate for bamboos is due to the cutting, in the previous year, of large quantities of inferior species in certain districts of the Northern Circle at a comparatively small outlay. Deducting the hay transactions referred to in paragraph 78 above, the collection of the remaining minor produce cost the department Rs. 27,434, or As. 12–11 per maund. This great increase in cost compared with the previous year is attributable to the large collection of catechu at Rs. 2–9–11 per maund in South Canara and to the increased collection of *nux vomica* and other valuable products in South Malabar. Some information as to the operations in respect to these valuable products should have been furnished.

80. The average rates of sale are slightly less than those of the previous year except for sandalwood and minor produce for which better prices were obtained owing to brisker demand.

Section II.—Removals by Purchasers under the Permit System.

81. The subjoined abstract shows the quantity and value of timber and other produce removed under the permit system compared with the results of the preceding year:—

PRODUCE removed by permit-holders on seigniorage or otherwise (Appendix 72-A).

Produce.	During 1890-91.			During 1891-92		
	Quantity.	Amount of sales.	Average.	Quantity.	Amount of sales.	Average.
Northern Circle.		RS.	RS. A. P.		RS.	RS. A. P.
Timber .. .. .. C. ft.	1,360,680	1,28,804	0 1 6	1,242,240	1,20,179	0 1 7
Firewood .. .. .. ,,	2,704,053	48,913	0 0 4	3,525,138	54,318	0 0 3
Bamboos .. .. .. No.	10,753,709	62,069	0 0 1	10,924,176	56,604	0 0 1
Grass and grazing	..	60,060	..	..	68,458	..
Minor produce	..	95,991	..	..	88,709	..
Total ..	..	3,95,837	..	..	3,88,268	..
Central Circle.						
Timber .. .. .. C. ft.	1,413,591	1,07,231	0 1 3	1,128,210	81,927	0 1 2
Firewood .. .. .. ,,	3,892,977	1,43,758	0 0 7	5,861,006	1,26,453	0 0 4
Bamboos .. .. .. No.	5,709,738	74,013	0 0 2	19,734,374	66,880	0 0 1
Grass and grazing	..	56,979	..	..	60,133	..
Minor produce	..	2,48,188	..	..	2,27,591	..
Total ..	..	6,30,169	..	..	5,62,984	..
Southern Circle.						
Timber .. .. .. C. ft.	621,939	60,096	0 1 6	307,249	46,558	0 2 5
Firewood .. .. .. ,,	3,431,339	79,517	0 0 4	2,777,741	79,701	0 0 6
Bamboos .. .. .. No.	1,516,218	29,852	0 0 3	355,034	21,659	0 1 0
Grass and grazing	..	34,859	..	..	53,420	..
Minor produce	..	98,254	..	..	95,479	..
Total ..	..	3,02,578	..	..	2,96,817	..
Presidency total—						
Timber .. .. .. C. ft.	3,396,210	2,96,131	0 1 5	2,677,699	2,48,664	0 1 6
Firewood .. .. .. ,,	10,028,369	2,72,188	0 0 5	12,163,885	2,60,472	0 0 4
Bamboos .. .. .. No.	17,979,665	1,65,934	0 0 2	31,013,584	1,45,143	0 0 1
Grass and grazing	..	1,51,898	..	..	1,82,011	..
Minor produce	..	4,42,433	..	..	4,11,779	..
Grand Total of Sales, Rupees ..	..	* 13,28,584	..	..	12,48,069	..

* In the report for 1890-91, Rs. 40 were shown in excess in the Northern Circle through a clerical error.

82. The total value of removals of the year under report as compared with that of the previous year shows a net decrease of more than Rs. 80,000, the net result of the marginally-noted variations under the different classes of produce. The chief fall is in the revenue under *timber*. Rupees 29,000 of this occurs in the districts of North Arcot and Madura, and is chiefly due to short demand owing to the distress caused by scarcity which also occasioned large removals in the former district under free grants; a further reason assigned in Madura is restrictions in the permit system. This requires explanation as the quantity of wood disposed of by the department also shows a considerable decrease in this district. The remaining decrease amounting to Rs. 18,000 occurs mainly—(1) in Godávari where it is due to disputes between landowners and renters in regard to the removal of timber from the Rampa forests; (2) in Kurnool and Salem for reasons similar to those referred to in the case of North Arcot, and (3) in Cuddapah and South Coimbatore owing to the substitution of the departmental system for the permit system.

Timber	— 47,467
Firewood and charcoal	— 11,716
Bamboos	— 20,791
Grazing	+ 30,113
Minor produce	— 30,897
	— 80,758

Under *firewood*, the decrease is chiefly due to shortness of demand consequent on scarcity in several districts and to the low prices realized on coupes in North Arcot by reason of stricter supervision which now prevents illicit felling. On the other hand the receipts under this head increased by Rs. 11,000 in South Arcot owing to large removals of casuarina wood for supply to Messrs. Parry and Co.'s factory and

for private sale in Chidambaram and Kumbakónam. The introduction of the coupe system in Tirukoilúr taluk also helps to account for the increase in this district.

The revenue from *bamboos* has likewise decreased chiefly in Kurnool, Cuddapah and North Coimbatore owing to absence of demand and consequent stoppage of departmental operations.

In spite of the general depression under removals by the permit system, there has been a net increase of more than Rs. 30,000 in the revenue from *grazing and fodder grass* in Cuddapah, Kurnool, Bellary, North Arcot and North Coimbatore, the last division having contributed more than 56 per cent. of the total increase. The increase is due to the removal of hill grass for fodder in Bellary and to the admission of zemindari cattle at full rates into Government reserves in North Arcot. The free grazing allowed by the Collector in Salem on account of the bad season affected the revenue of the district by Rs. 4,000.

Under *minor produce*, there is a total decrease of Rs. 54,000, which has been partially counterbalanced by an increase of Rs. 24,000. The districts where the fall is most noticeable are Godávari, Anantapur, Cuddapah, North Arcot and North Coimbatore where it is due generally to failure of crop and bad season, and in Nellore where it is attributed to the failure of a mica-mining speculation and the smaller removals of tangedu bark (*Cassia auriculata*).

Of the increase of Rs. 24,000 noticed above, Rs. 13,000 occurs in Madura, which is the result of the transfer to " Forests " of cardamom rents of 1890–91 erroneously credited to Land Revenue " Miscellaneous " in that year and of the prompt collection of those rents during the year under report. The balance appears in Kistna, Chingleput and South Arcot where the leases for avaram bark were sold at better rates.

83. *Adequacy of prices realized for timber and fuel.*—The Government of India observed, in its review of the Administration Report for 1889–90, that the causes of the low prices realized for timber and fuel require to be investigated in order that it might be ascertained how far they are due to defects in the working of the forests and how far to want of communications. With reference to this remark, the Conservators reported that as regards higher class timber the public demand was chiefly met from imported Burma wood, and that the prices of lower class timber and fuel represented only the seigniorage rates which were advisedly kept low in the interests of the agriculturists and of the poorer ryots. The Board in its report on the Forest administration for 1890–91 observed, however, that further investigation should be made on the lines indicated by the Government of India, and Government concurred in this view. The Conservators of Forests, Central and Southern Circles, have submitted further reports accordingly which are printed at the close of this report (Appendix E). The Conservator, Northern Circle, has not reported. The reports of his colleagues appear to the Board to show that if outside competition, the inadequacy of the demand in many places, and the difficulty of transport often caused by defective communications be taken into account the prices are not so low as to call for any general enhancement, which would, the Board considers, be inadvisable at present. At the same time there is no absolute necessity to adhere to the seigniorage rates prescribed for wood cut in reserved and unreserved lands, for the generally superior article obtained in reserved forests. In particular instances, therefore, where the seigniorage rates appear to be inadequate, Collectors may, after consultation with Conservators, charge higher for *good* wood cut in forests for local requirements. Where wood is obtained from forests not for the local requirements of the population but by contractors and others for business purposes, market prices and not seigniorage rates should of course be charged.

84. *Comparative cost of departmental and private working.*—In paragraph 20 of its review on the last Forest report (G.O., dated 12th December 1891, No. 1187), Government admitted the practical difficulty of apportioning the cost of the permanent establishment between departmental cutting and collection of forest produce and similar work done by private agency, but assumed that the charges might be allotted in equal proportions to the two systems. But the share of the establishment charges debitable to the other operations carried on by the department, viz., construction of roads, buildings, &c., demarcation, settlement and survey of reserves, and the conservation of forest areas for climatic purposes, was not deducted, the

whole of the expenditure under "B. Establishments" having been debited to the two systems of working above referred to. The Board considers, however, that as settlement, survey and other preliminary operations are at present necessarily occupying a very large proportion of the time of the Forest officers, half the total charges under "B. Establishment" may fairly be debited to these operations, the other half being equally distributed between Government and private working. The greater attention required when the cutting and collection of forest produce is under the direct management of Government may be held to be counterbalanced by the much larger area under private working.

Proceeding on these lines the cost and the net profits under the two systems have been calculated in the subjoined statement, from which it will be seen that the profit under departmental working in the case of timber is nearly thrice that secured under removals by private agency. In regard to fuel, however, departmental working shows a loss, while private working shows a slight profit, chiefly on account of the heavy expenditure incurred on the collection and transport of fuel from the forests in Nellore and Nilgiris. The profits under sandalwood, which is worked only departmentally, are satisfactory. Departmental working shows loss under bamboos and minor produce, and for this no satisfactory explanation can be given at present. The Conservators are requested to investigate the matter.

Items.	Measure.	Quantity collected (Forms Nos. 69, 70 and 72).	Amount of sale-proceeds (Forms Nos. 71 and 72).	Add or deduct increase or decrease in value of stock in hand (Form No. 73-A).	Net financial result (column 4 + or — column 5).
1	2	3	4	5	6
Departmental Working.			Rs. A. P.	Rs. A. P.	Rs. A. P.
Timber	Cubic feet.	261,420	1,66,936 0 0	— 30,362 0 0	+ 1,36,574 0 0
Fuel	Do.	1,806,320	1,22,049 0 0	+ 310 0 0	+ 1,22,359 0 0
Bamboos	Number.	32,352	1,312 0 0	— 55 0 0	+ 1,257 0 0
Sandalwood	Cubic feet.	5,126	40,957 0 0	— 2,587 0 0	+ 38,370 0 0
Minor produce	Maunds.	184,404	45,051 0 0	+ 20,683 0 0	+ 65,734 0 0
Private Working.					
Timber	Cubic feet.	2,677,699	2,48,664 0 0	..	2,48,664 0 0
Fuel	Do.	12,163,885	2,60,472 0 0	..	2,60,472 0 0
Bamboos	Number.	31,013,584	1,45,143 0 0	..	1,45,143 0 0
Grazing	..		1,82,011 0 0	..	1,82,011 0 0
Minor produce	..		4,11,779 0 0	..	4,11,779 0 0

Items.	Charges. A. Conservancy and Works, Form No. 64.	Charges. B. Establishment and Contingencies, Form No. 64.*	Charges. Total.	Net profit or loss (column 6 — column 9).	Rate of net profit (col. 10 ÷ 3) per measure in column 2.
	7	8	9	10	11
Departmental Working.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Timber	45,981 0 0	41,668 0 0	87,649 0 0	+ 48,925 0 0	+ 0 3 0
Fuel	70,437 0 0	63,831 0 0	1,34,268 0 0	— 11,909 0 0	— 0 0 1
Bamboos	1,034 0 0	937 0 0	1,971 0 0	— 714 0 0	— 0 0 4
Sandalwood	4,971 0 0	4,505 0 0	9,476 0 0	+ 28,894 0 0	+ 5 10 2
Minor produce including grass or hay	41,276 0 0	37,405 0 0	78,681 0 0	— 12,947 0 0	— 0 1 2
Private Working.					
Timber	15,212 0 0	29,557 0 0	44,769 0 0	+ 2,03,895 0 0	+ 0 1 .2
Fuel	15,934 0 0	30,959 0 0	46,893 0 0	+ 2,13,579 0 0	+ 0 0 2·5
Bamboos	8,879 0 0	17,252 0 0	26,131 0 0	+ 1,19,012 0 0	+ 0 0 0·7
Grazing	11,135 0 0	21,634 0 0	32,769 0 0	+ 1,49,242 0 0	..
Minor produce	25,191 0 0	48,944 0 0	74,135 0 0	+ 3,37,644 0 0	..

* *Note.*—The total establishment charges assigned to "Departmental Working" have been distributed among the various classes of produce in proportion to the A charges on each which are separately reported. In the case of "Private Working" only the total of the A charges is known. This amount, and the share of the B charges assigned to this system, have been distributed among the various heads of produce in proportion to the sale-proceeds obtained from each.

85. The sales of confiscated produce during the year under report as compared with those of the previous year are recorded in the subjoined abstract :—

ABSTRACT P—Confiscations.

Produce.	During 1890-91.			During 1891-92.		
	Quantity.	Value.	Average.	Quantity.	Value.	Average.
Northern Circle.		RS.	RS. A. P.		RS.	RS. A. P.
Timber .. .. C. ft.	12,181	4,327	0 5 8	32,036	7,712	0 3 10
Firewood .. .. .. C. ft.	15,282	469	0 0 6	6,623	490	0 1
Bamboos .. .. .. No.	6,138	60	0 0 2	6,930	102	0 0 3
Minor produce. Money value ..	..	129	..	..	763	..
Total ..	..	4,985	..	..	9,067	..
Central Circle.						
Timber .. .. C. ft.	6,594	1,601	0 3 11	7,179	2,119	0 4 9
Firewood .. .. .. C. ft.	7,424	557	0 1 2	6,382	429	0 1 1
Bamboos .. .. .. No.	19,836	322	0 0 3	10,086	130	0 0 2
Minor produce. Money value ..	..	383	..	..	327	..
Total ..	..	2,863	..	..	3,005	..
Southern Circle.						
Timber .. .. C. ft.	9,727	1,981	0 3 3	5,682	1,162	0 3 3
Firewood .. .. .. C. ft.	4,428	192	0 0 8	2,612	142	0 0 10
Bamboos .. .. .. No.	2,268	54	0 0 5	4,900	102	0 0 4
Minor produce. Money value ..	..	113	..	..	278	..
Total ..	..	2,340	..	..	1,684	..
Presidency Total. Timber .. .. C. ft.	28,502	7,909	0 4 5	44,897	10,993	0 3 11
Presidency Total. Firewood .. C. ft.	27,134	1,218	0 0 8	15,617	1,061	0 1 1
Presidency Total. Bamboos .. .. No.	28,242	436	0 0 3	21,916	334	0 0 3
Presidency Total. Minor forest produce. Money value ..	..	625	..	..	1,368	..
Grand Total ..	..	10,188	..	..	13,756	..

There is an increase in Godávari, Kistna, Kurnool and Cuddapah in the quantity and value of timber confiscated during the year as compared with the previous year. The Collector of Godávari reports that the increase was due to a large quantity of drift teak and miscellaneous timber, amounting to about 3,000 logs, having been salved in the floods of the Godávari river. The Collectors of Kistna and Kurnool have not explained the increase in their districts. In Cuddapah it is ascribed to the bad season and the consequent increase of crime as already stated.

Section III.—Free Grants of Forest Produce.

86. The following abstract shows the quantities of timber and other produce removed on free permits :—

ABSTRACT Q.—Free grants.

District.	Timber.	Firewood.	Bamboos.	Minor Produce.	Money values.
Northern Circle.	C.FT.	C.FT.	NO.	RS.	RS.
Godávari	4,594	..	..	..	397
Kistna	155	..	..	8	31
Kurnool	1,000	915	12,069	37	191
Total ..	5,749	915	12,069	45	619
Free grants of previous year ..	432	..	3,860	390	446
Central Circle.					
Nellore	40,164	..	..	588	4,776
Cuddapah	2,450	..	14,250	..	212
Chingleput	..	..	144	..	9
North Arcot	41,021	..	44,000	..	5,009
South do.	..	400	..	..	27
Salem	5,435	..	6,990	..	Not given.
Total ..	89,070	400	65,384	588	10,033
Free grants of previous year ..	37,575	400	26,677	304	3,859
Southern Circle.					
Madura	58	..	..	..	5
North Coimbatore	2,040	..	..	..	127
Nilgiris	682	36	1,910	..	120
North Malabar	196	..	850	..	49
Total ..	2,976	36	2,760	..	301
Free grants of previous year ..	2,667	..	5,430	8	485
Total free grants for 1891-92 ..	97,795	1,351	80,213	633	10,953
Total free grants for 1890-91 ..	40,674	400	35,967	702	4,790

Ganjam	Tanjore
Vizagapatam	Tinnevelly
Bellary	South Coimbatore
Anantapur	South Malabar
Trichinopoly	

The Collectors of the districts noted in the margin have not furnished information in regard to the quantity and approximate value of timber and other produce removed on free permits. The total results of the other districts show a considerable increase as compared with 1890–91. The most noteworthy increases occur in North Arcot and Nellore where large quantities of timber, especially palmyra trees, were given away to poor ryots for rebuilding their houses which had been burnt down. Fires were of course more common than usual owing to the general failure of rain. The Collector of Nellore reports that a fire which occurred at Gúdúr consumed more than 250 houses and that care was taken to grant help to the deserving only. The Collectors of Ganjam, Vizagapatam and Anantapur state that, in cases of houses burnt by fire, free permits for building materials were given, but that no account was kept of the wood removed. The omission is unsatisfactory and must not recur. In Godávari, 4,600 cubic feet of wood was removed from the reserved forests at Bhadráchalam for rebuilding houses destroyed by the fire at the Waddigudem village, but here also no account of removals for the same purpose from unreserved forests was maintained though the Collector thinks the amount was large.

CHAPTER VI.

FINANCIAL RESULTS.

87. The revenue and expenditure of the Presidency for the year as per Examiner's Form No. 64, compared with the actuals of the five previous years, are as follow:—

Items.	Circle.	1886-87. Circle total.	1886-87. Grand total of each item.	1887-88. Circle total.	1887-88. Grand total of each item.	1888-89. Circle total.	1888-89. Grand total of each item.
1	2	3	4	5	6	7	8
		RS.	RS.	RS.	RS.	RS.	RS.
Revenue ..	Northern	2,88,906	12,46,783	3,00,155	13,74,920	3,84,467	15,15,006
	Central	5,67,601		6,28,884		6,07,979	
	Southern	3,90,276		4,45,881		5,22,560	
A. Conservancy and works.	Northern	88,465	6,00,635	91,733	5,53,446	1,16,414	6,62,567
	Central	1,96,402		1,97,356		2,13,715	
	Southern	3,15,768		2,64,357		3,32,438	
B. Establishment.	Northern	1,38,586	5,55,052	1,46,766	5,64,766	1,46,863	5,54,107
	Central	2,08,635		2,11,475		1,97,979	
	Southern	2,07,831		2,06,525		2,09,265	
Total of expenditure.	Northern	2,27,051	11,55,687	2,38,499	11,18,212	2,63,277	12,16,674
	Central	4,05,037		4,08,831		4,11,694	
	Southern	5,23,599		4,70,882		5,41,703	
Net result ..	Northern	+ 61,855	+ 91,096	+ 61,656	+2,56,708	+ 1,21,190	+2,98,332
	Central	+ 1,62,564		+ 2,20,053		+ 1,96,285	
	Southern	— 1,33,323		— 25,001		— 19,143	

Items.	Circle.	1889-90. Circle total.	1889-90. Grand total of each item.	1890-91. Circle total.	1890-91. Grand total of each item.	1891-92. Circle total.	1891-92. Grand total of each item.	Increase or decrease in the year under report compared with the previous year. Circle total.	Increase or decrease in the year under report compared with the previous year. Grand total of each item.
		9	10	11	12	13	14	15	16
		RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Revenue ..	Northern ..	3,43,217	15,57,627	4,80,462	17,95,408	4,38,680	16,94,215	— 41,782	— 1,01,193
	Central ..	7,29,068		7,72,141		7,01,855		— 70,286	
	Southern ..	4,85,342		5,42,805		5,53,680		+ 10,875	
A Conservancy and works.	Northern ..	1,08,833	6,04,099	1,37,659	6,63,824	1,16,974	6,90,545	— 20,685	+ 26,721
	Central ..	1,96,444		1,92,368		2,47,479		+ 55,111	
	Southern ..	2,98,822		3,33,797		3,26,092		— 7,705	
B. Establishment.	Northern ..	1,55,101	5,61,259	1,59,223	5,89,460	1,53,177	5,93,384	— 6,046	+ 3,924
	Central ..	1,94,957		2,03,604		2,16,450		+ 12,846	
	Southern ..	2,11,201		2,26,633		2,23,757		— 2,876	
Total of expenditure.	Northern ..	2,63,934	11,65,358	2,96,882	12,53,284	2,70,151	12,83,929	— 26,731	+ 30,645
	Central ..	3,91,401		3,95,972		4,63,929		+ 67,957	
	Southern ..	5,10,023		5,60,430		5,49,849		— 10,581	
Net result ..	Northern ..	+ 79,283	+3,92,269	+ 1,83,580	+ 5,42,124	+ 1,68,529	+ 4,10,286	— 15,051	— 1,31,838
	Central ..	+ 3,37,667		+ 3,76,169		+ 2,37,926		— 1,38,243	
	Southern ..	— 24,681		— 17,625		+ 3,831		+ 21,456	

The receipts of the year under review are less by about a lakh of rupees than those of 1890–91, but are still considerably in excess of those of any previous years.

88. The chief causes which have brought about the falling off as compared with the past year are—

(1) The use of Singareni coal in place of firewood on railways by which Kurnool lost nearly half a lakh of rupees.

(2) The unfavorable character of the season throughout a great part of the presidency which specially affected the forest revenue in North Arcot, Salem and Cuddapah.

(3) The stoppage of collection of redwood roots in Cuddapah for want of adequate demand and of sandalwood collection in North Arcot pending the preparation of a proper working scheme.

(4) The smaller removals of timber and bamboos from the Rampa forests in Godávari owing to disputes between land-owners and renters.

89. The expenditure under A. "Conservancy and Works" shows an increase of about Rs. 30,000 due mainly to the setting up of a tramway in Cuddapah forests and outlay on departmental collection of hay in Nellore, Cuddapah and North Arcot and on large demarcation works in the last district. The re-organization of the controlling staff, though given effect to in October 1891, was not, except as regards the appointment of a third Conservator, arranged till after the close of the year and there was thus no considerable extra expenditure on this account.

90. The net surplus of the year is a little more than 4 lakhs of rupees, the amount put down in the revised estimate, and, considering the circumstances of the year, this result is, the Board considers, very satisfactory. It represents 32 per cent. of the outlay and 25 per cent. of the gross receipts. Of the total surplus, the Northern Circle contributed 41 per cent., the Central 57 and the Southern about 1 per cent. The last-named circle, as recently constituted, has shown constant deficits during the preceding five years and only just pays its way in the year under report—a fact which is partly due to heavy expenditure on surveys by the Government of India Survey Party.

CHAPTER VII.

General Remarks.

91. *Forest School.*—Owing to the paucity of trained forest school men in the department and to the circumstance that no one can ordinarily be appointed a ranger from 1st April 1893 unless he holds the Dehra Dún school certificate, a much larger number of men were deputed from this presidency to the Dehra Dún school during the year under report than in 1890-91 as shown in the margin. The total number of trained men in the department, inclusive of those under training in the school, now amounts to 64 and compared with the proposed number of Rangers, viz., 111, the department is, therefore, still very short of trained subordinates. This deficiency, which can only be gradually overcome, is a great stumbling block in the way of improved administration.

	Number deputed in June 1890.	Number deputed in June 1891.
Northern Circle	5	2
Central „		6
Southern „		8
Total ...	5	16

92. *Conduct of the Establishment.*—The conduct of the subordinate establishment was, on the whole, fair; but in the forester grade eight men were suspended for various causes for short periods. One forester in Kistna and another in Madura were convicted of criminal breach of trust and theft respectively. In Salem and South Coimbatore, three foresters were dismissed and one reduced to post of forest guard in South Arcot.

One ranger was suspended in North Arcot and transferred to Trichinopoly.

There was the normal number of dismissals, reductions and suspensions among forest guards.

93. *Health of the establishment.*—The subordinate establishments in all districts except Anantapur, Nellore, North Arcot, Chingleput, South Arcot, Tanjore and Trichinopoly are reported to have suffered more or less from fever. There were five

deaths from this cause among foresters and many more among the temporary establishments and inferior servants. Certain districts were visited by cholera to which a few guards and tannahdars succumbed.

94. *Service books.*—The verification of service books has now been completed in almost all the districts and it is hoped that there will, in future, be no difficulty or delay when forest subordinates submit their papers for pension or gratuity.

95. *Wild Elephants.*—In South Malabar one young cow elephant was captured during the year, but a cow calf elephant captured in the previous year died from rupture of the bladder.

96. It will be noticed from the remarks made in various portions of this report that Collectors' administration reports have been by no means as complete and satisfactory as could be desired. Their special attention is drawn to the omissions which have been pointed out in the foregoing paragraphs.

97. Making allowance for the effects of the drought which prevailed among so many districts, the forest work of the presidency in the year under report has, the Board is glad to record, shown steady progress.

APPENDIX A.

Causes of Delay in the submission of final notifications of blocks.

Districts.	Causes of delay.														
	Pending preparation of maps and completion of demarcation.	Awaiting disposal of appeals.	Awaiting carrying out of exchanges of lands.	Only recently notified under section 4.	Awaiting expiry of appeal time.	Awaiting payment of compensation.	Awaiting settlement of claims under inquiry.	Awaiting District Forest-officer's answers to claims, &c., and acquisition of lands, &c.	Final report under preparation.	Pending revision of notifications, &c.	Awaiting replies to references made to Collector and Board.	Awaiting settlement of extension recently notified.	Awaiting cancellation of the initial notification.	Other causes *i.e.*, awaiting return of records from District Courts, awaiting information from Tahsildars, &c.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ganjam	19	..	..	..	..	..	..	..	..	..	..	..	..	9	28
Vizagapatam	..	..	..	5	..	..	..	..	..	..	..	..	..	5	10
Godávari	7	..	2	..	..	..	..	..	..	..	..	..	..	25	34
Kistna	..	..	..	..	1	1	..	..	..	..	..	..	..	2	4
Anantapur	8	..	..	..	..	1	2	4	1	4	..	..	..	7	27
Bellary	4	..	..	..	..	4	..	5	..	6	..	..	..	9	28
Kurnool	..	..	..	5	..	..	..	..	..	..	..	..	..	1	6
Nellore	5	4	..	..	..	..	..	..	..	..	..	..	..	..	9
Cuddapah	50	..	..	..	..	..	..	1	..	..	..	..	..	..	51
Chingleput	7	1	..	..	..	..	5	..	2	..	..	..	..	26	41
North Arcot	12	..	..	..	..	..	..	..	1	..	..	..	..	1	14
South Arcot	3	..	..	..	1	..	..	5	..	5	..	..	..	12	26
Tanjore	1	2	..	..	..	..	..	..	..	..	..	..	..	..	3
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	21	21
Salem	4	10	..	..	..	..	..	9	..	..	..	..	..	..	23
Madura	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
North Coimbatore	14	..	..	..	5	..	3	17	1	..	..	..	..	2	42
Nilgiris	..	..	..	8	..	..	..	..	..	1	..	3	1	2	15
Malabar	12	5	..	..	..	..	1	..	..	..	..	..	2	..	20
South Canara	6	..	..	..	..	..	..	..	..	2	..	..	..	..	8
Total ..	152	22	2	18	7	6	11	41	6	18	3	1	2	122	411

Note.—Figure in column 16 includes the 70 blocks returned to Collectors for revision.

APPENDIX B.

EXPERIMENTS AND EXOTICS.

Conifers.

In the Nílgiris, the seeds of the species *Pinus halepensis, Laricio Austriacea, Picea excelsa* sown in 1890–91 germinated, but the plants did not grow well during the year under report.

Dates.

In *Godávari*, date does not appear to thrive well. The Arabian date seedlings planted in Ramasaram have almost died out.

In *Kistna*, 800 seedlings were planted in the Weld reserve, of which only 400 are now surviving.

In *Anantapur*, the 30,000 dates sown at Narásapur during 1890–91 appear to have been fairly successful, but those in the eastern part of the reserve were killed by a flood. Twenty-five plants of the species were brought from Shaharanpur, of which all except two, which died soon after arrival, are doing well.

In *Chingleput*, the 58 seedlings from Busrah and the 68 of the South Malabar date continue to thrive fairly. The 24 seedlings of *bazaar* dates planted last year and seven transplanted during the year are also in good condition. A supply of Egyptian dates was received in March 1891 and distributed to Range officers, but the present condition has not yet been reported.

In *North Arcot*, 200,000 date seeds were obtained from Malabar and sown in nurseries in the Tiruvellam plantation and are in a promising state.

In *South Arcot*, there are 26 Persian dates in the Villupuram range and 35 seedlings in Vriddháchalam range, all in good condition.

In *Tanjore*, it is reported that in the Vettangudi forests 174 plants were surviving at the beginning of the year out of those planted in 1881 and 114 out of those planted in 1889. Of the 223 Persian date seeds received from Conservator of Forests and "dibbled" in pots in the Vattangudi nursery, only 63 germinated. The Collector of Tanjore is not in favour of planting dates as he considers the experiment to have been expensive and unsuccessful. The Conservator, on the other hand, observes that the experiment, if properly carried out, would not be more expensive than casuarina plantations.

In *Trichinopoly* the date plants referred to in the previous report are said to be progressing favorably.

In *Salem*, the 34 palm seedlings, which were transplanted in Dharmapuri taluk on the banks of the Chinnar river, are not in a healthy condition. Out of the 100 seeds grown in the office compound, 89 have germinated. Out of the 200 seeds supplied to the Námakal taluk, 50 were sown in bamboo baskets and 18 of these germinated and were transplanted in the Karavakalli and Combai reserves, but are not in a flourishing condition.

The date plantations are not successful in *Madura*. Out of the 25 plants which were raised in the Periyakulam office garden and planted out on the sides of the Kodaikánal ghât road, five are dead and the rest are stunted in growth. The 300 plants raised in a nursery near the foot of the Pambar ghât road have all died. These casualties are said to be due to defective planting and want of supervision on the part of the Ranger.

In *North Coimbatore*, Egyptian seeds were sown during the year in the Bylore sandalwood plantation.

In the *Nilgiris*, the few Cabul plants left in the Kullar nursery are reported not to thrive well.

In *North Malabar*, of the two plants of *Phœnix dactylifera* referred to in the previous year's report, one died and the other is sickly.

In *South Malabar*, out of the 153 plants put out in Panangode I and II blocks in 1887, all are living, except 21 destroyed by elephants. Out of 175 plants in the Wallvashiri block, ten died. Nine hundred and eighty Egyptian seeds were obtained in March 1891, out of which 465 seedlings were raised and planted out; only 36 of these have died.

In *South Canara*, the 31 bazaar seed plants reported to have survived in the previous year died in the year under report. From the foregoing reports, it is evident that the experiments made by the department with regard to the planting of exotic date have not yet been conspicuously successful.

Eucalyptus.

In *Godávari*, most of the seedlings which were reported to have been doing well last year in the Bandamurlunka reserve have since died.

In *Salem*, the trees planted in the Hosúr Range office are doing well. One of these is 24 feet in height and 11 inches in circumference at breast height and the other is 15 feet and 5½ inches in circumference.

In the *Nilgiris*, the various species planted in Sim's Park and Lovedale reserves have not thriven well.

In *North Malabar*, the four largest trees of *Eucalyptus marginata* continue to grow satisfactorily. The dimensions of the largest are—

No.	Height. FEET.	Girth. FEET.
1	67	4½
2	58	4
3	45	3¼
4	42	3

The 20 trees of *Eucalyptus rostrata* referred to in the last report continue to flourish and their average height is 54 feet and girth 3¼ feet at 4 feet from the ground. The one tree of a third species, also referred to in the last report, has attained a height of 54 feet with a girth of 2¾ feet at 4 feet from the ground.

In *South Canara*, of the 12 *Robusta* surviving at the end of 1890–91, 3 have died and the rest are doing well. The one *Citriodora* has died.

Giant bamboos, &c.

In the *Nilgiris*, eight cuttings of the species *Dendrocalamus longispathus* were planted in Benne and are growing well. Cuttings of *Cephalostachyum pergracile* have also been planted, but they grow more slowly than the other species. The Chinese and Japanese bamboo seeds indented for were received after the close of the year. The Collector reports that experimental cultivation of these can be very successfully carried on in the nurseries at Benne and at Benhope.

In *North Malabar*, the species *D. Brandisii* thrives well. The largest culm is 95 feet in height, the thickest stems measuring 15 inches in girth. The Conservator observes that these are not the largest of the giant class, the girth of which would be nearly 25 inches. The species *Dendrocalamus longispathus* and *Cephalostachyum pergracile* are also growing well. The 13 clumps in the experimental garden have grown to an average height of 24 feet, with a girth of 10 inches to each culm.

Beesha Travancorea.

In the *Nilgiris*, the 8 plants of this species in the Benhope nursery are growing fairly well.

In *North Malabar*, the species grow vigorously both at Manantoddy and Kanot.

Golden Burmah bamboos (Bambusa vulgaris).

In *North Malabar*, the 8 clumps at the experimental garden are growing well. The tallest shoots of the year average 32 feet with a girth of 10½ inches. The one clump planted in Kanot nursery in 1886 is now 40 feet in height with a girth of 11 inches at the base. The plants reported to have been planted in "takals" are thriving well, and the Collector writes, "the experiment having proved a success, the planting of takals with the Burmah thornless bamboos will be undertaken next year on a more extensive scale."

In *South Malabar*, the Burmah bamboos (*Arundinacea Brandisii*) and (*Dendrocalamus longispathus*) planted along the river banks are growing luxuriantly and have formed a protection to the banks. They are only seven years old and have not matured sufficiently to be felled. The *Bambusa longispathus* and *Cephalostachyum pergracile* planted in 1889–90 and 1890–91 in Pokote blocks IV and V are growing well.

At Parappa, in *South Canara*, besides the 2 clumps mentioned last year, 13 plants were raised by cutting in 1891–92, of which 4 died. The rate of growth of some of the plants is very encouraging.

Ipecacuanha.

The plants in *North Malabar* are all dead.

In *South Malabar*, out of 460 plants of 1887, 145 perished during the year and 315 now survive. These were transplanted and manured. The 14 plants put down in 1884 and the 7 put down in 1887 were sent to the Government Botanist, Ootacamund, who pronounced the plants of 1884 to be satisfactory and the rest poor.

Lancewood.

In *North Malabar* the 5 plants reported last year to be growing satisfactorily died during the year.

Mahogany.

The plants in Konukollu and Bezváda reserves in *Kistna* continue to grow well. In *South Arcot*, in the Villupuram range, 14 seedlings are reported to be promising and to have attained a height of 7 to 8 feet. Those at Tenmalai Javadies (Melput) are also thriving well

In *Tanjore*, out of the 38 plants which were alive in the Vettangudi forest, 3 died and the remaining 35 are not promising.

In *Trichinopoly*, the saplings in the Cauvery line plantations are said to be thriving.

In *Madura*, the species seems to do exceedingly well. The trees in the Periyakulam office garden are in good condition and have grown well. Along the sides of the Pambar ghat road, 500 seedlings were put out and all (except 25 which died) are from 10 to 14 inches high. The 25 plants in the front of the Thirthamantapam in the Alagar hill have grown 15 feet in height. The experiment is so successful that the Collector considers it advisable to extend the growth of this valuable tree.

In the *Nilgiris*, the young trees near the Kullar stream have grown from 20 to 25 feet high. The soil above Barliyár seems quite congenial to the growth of this species. A nursery has been established and half a pound of *Swietenia macrophylla* seed sown. The young plants of *Swietenia macrophylla* in the front of the Benne House are now 2 to 3 feet high. The Collector is so sanguine of the success of the species at Benne that he proposes to extend the nursery, where 2 lb. of seeds have already been sown so as to conduct the experiment on a larger scale.

In *North Malabar*, out of the 100 plants reported last year as living in Kanot, 80 died owing to the attacks of borers. The surviving plants are not healthy and vary from 11 to 27 feet in height. The few plants at the experimental garden reported last year to be sickly are nearly dead from the attacks of the borer.

In *South Malabar*, the *Swietenia macrophylla* tree in *Chathamborai* measured 81 feet 9 inches in height and 76 inches in girth at base and 57 inches at 5 feet from the ground against 79 feet in height and 73 inches in girth at base and 55 at 5 feet from the ground last year. This tree is twenty years old. The other plants in Irvillikava, Ramalur and Panangod, which are of the species *Swietenia mahogani*, suffered, as usual, from the attacks of the borer and have been given up as failures. Out of the 843 plants of *Swietenia macrophylla* planted as standards in Pokote block V, 481 are living and the rest were destroyed by sambur. Four hundred more standards were planted in the same block and 1,256 in Pokote block No. VI in 1891. These are thriving well. Five pounds of *Swietenia macrophylla* seeds were received from the Botanical Garden, Calcutta and sown. One thousand seedlings have already sprung up and 2,000 more are expected to come up. These will be planted as standards with teak in block VII.

Manilla hemp (*Musa textilis*).

In the Nilgiris, two plants were obtained from North Wynaad and planted in Benne nursery where they are doing well. The plants in North Malabar grow luxuriantly.

Peltophorum ferrugineum.

The 24 plants in Tanjore are in good condition. The height of the plants varies from 29 feet 7 inches to 15½ feet and the girth from 3 feet 2 inches to 1 foot 3 inches. None of them flowered during the year.

Rubber trees.

In *North Malabar*, the *Ceara* rubber trees in the experimental garden grow like weeds. The largest tree is 46 feet high at 4½ feet from the ground. The two trees of *Hevea Braziliensis* in the experimental garden at Manantoddy and the three in Kanot continue to grow fairly well.

In *South Malabar*, all the rubber trees, *Havea*, *Castilloa*, *Ceara*, are thriving. No propagation has been attempted since 1887. The 36 *Landulphia floria* are doing well.

Sappan wood (*Cæsalpinia sappan*).

The plants reported to be alive in Kanot last year are growing well, but those at Manantoddy are not doing well.

Sisso plants.—The two plants in the Salem district are doing well.

APPENDIX C.

STATEMENT showing the results of transport of casuarina fuel by tramway compared with the transport by carts.

Capital Account, 1888-89.

Dr.	Rs.	A.	P.	*Cr.*	Rs.	A.	P.
To cost of plant delivered at Virinjipuram..	10,815	8	11	By interest at 4 per cent.	432	10	0
				,, depreciation at 6 per cent.	648	14	11
				,, balance	9,734	0	0
Total ..	10,815	8	11	Total ..	10,815	8	11

Revenue Account, 1888-89.

Dr.	Rs.	A.	P.	*Cr.*	Rs.	A.	P.
To working expenses	88	2	9	By balance written off	1,406	14	5
,, road-making, repairs, &c.	237	2	9				
,, interest	432	10	0				
,, depreciation	648	14	11				
Total ..	1,406	14	5	Total ..	1,406	14	5

Work done—940½ tons of fuel moved 1¾ miles = 1,645⅞ ton miles.
Actual cost of work—1,645⅞ ton miles at annas 13·68 = Rs. 1,406-14-5.
Estimated cost of carting—1,645⅞ ton miles at annas 4·00 = Rs. 411-7-6.

Capital Account, 1889-90.

Dr.	Rs.	A.	P.	*Cr.*	Rs.	A.	P.
To balance from 1888-89	9,734	0	0	By interest at 4 per cent.	389	5	9
,, renewals	92	7	0	,, depreciation at 6 per cent.	584	0	7
				,, balance	8,853	0	8
Total ..	9,826	7	0	Total ..	9,826	7	0

Revenue Account, 1889-90.

Dr.	Rs.	A.	P.	*Cr.*	Rs.	A.	P.
To working expenses	226	0	0	By balance written off	1,403	6	7
,, road-making, repairs, &c.	204	0	3				
,, interest	389	5	9				
,, depreciation	584	0	7				
Total ..	1,403	6	7	Total ..	1,403	6	7

Work done— { 768 tons of fuel moved 1¾ miles = 1,344 / 1,056 do. 1½ miles = 1,584 } = 2,928 ton miles.
Actual cost of work done—2,928 ton miles at annas 7·67 = Rs. 1,403-6-7.
Estimated cost of carting—2,928 ton miles at annas 4·00 = Rs. 732.

Capital Account, 1890-91.

Dr.	Rs.	A.	P.	*Cr.*	Rs.	A.	P.
To balance from 1889-90	8,853	0	8	By interest at 4 per cent.	354	1	11
,, renewals during the year	179	0	0	,, depreciation at 6 per cent.	531	2	10
				,, balance	8,146	11	11
Total ..	9,032	0	8	Total ..	9,032	0	8

Revenue Account, 1890-91.

Dr.	Rs.	A.	P.	*Cr.*	Rs.	A.	P.
To working expenses	308	11	6	By balance written off	1,197	0	3
,, interest	354	1	11				
,, depreciation	534	2	10				
Total ..	1,197	0	3	Total ..	1,197	0	3

Work done—1,495 tons of fuel, &c., moved 2½ miles = 3,737½ ton miles.
Actual cost of work done—3,737½ ton miles at annas 5·13 = Rs. 1,197-0-3.
Estimated cost of carting—3,737½ ton miles at annas 4·89 = Rs. 1,141-4-0.

Capital Account, 1891-92.

Dr.	Rs.	A.	P.	*Cr.*	Rs.	A.	P.
To balance from 1890-91	8,146	11	11	By interest at 4 per cent.	325	13	11
,, additional ½ mile of line	3,050	0	0	,, depreciation at 6 per cent.	488	12	10
,, renewals	100	0	0	,, balance	10,482	1	2
Total ..	11,296	11	11	Total ..	11,296	11	11

Revenue Account, 1891-92.

Dr.	Rs.	A.	P.	*Cr.*	Rs.	A.	P.
To working expenses	237	0	0	By balance written off	1,123	12	7
,, road-making, repairs, &c.	72	1	10				
,, interest	325	13	11				
,, depreciation	488	12	10				
Total ..	1,123	12	7	Total ..	1,123	12	7

Work done—1,632 tons of fuel moved 2½ miles = 4,080 ton miles.
Actual cost of work—4,080 ton miles at annas 4·40 = Rs. 1,123-12-7.
Estimated cost of carting—4,080 ton miles at annas 4·80 = Rs. 1,224.

APPENDIX D.

A DETAILED list of completed Forest buildings in the Madras Presidency with their approximate cost, &c., as far as they have been reported by District Forest-officers.

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					NORTHERN CIRCLE.		
				RS. A. P.			
Ganjam.	West Goomsur.	Rest-house ..	Russellkonda ..	2,000 0 0	Rest-house with out-houses, the former (containing 4 rooms and 3 bath-rooms) of sun-dried bricks and thatch roof, the latter, sun-dried bricks and tiled roof.	Used by District Forest-officer and Range officers when on inspection.	Purchased.
	Do. ..	Do. ..	Mujaguda ..	248 3 8	Burnt bricks and thatch roof, 3 rooms 12 × 12 and 2 bath-rooms, out-houses of mud walls and thatch roof.	Do. do.	Built.
	Do. ..	Do. ..	Gullery ..	972 5 0	Thatch roof and mud walls, one room and one side room with 2 bath-rooms, out-houses, mud wall and thatch roof.	Do. do.	
	Do. ..	Do. ..	Rambha ..	449 2 4	One room 20 × 20, one 20 × 10 and two bath-rooms. Built of sâl planks and thatch-roof, out-houses walled with sâl planks and thatch roof.	Do. do.	
	Do. ..	Do. ..	Hattiguda ..	473 6 3	One room 20 × 20, one 20 × 10 and two bath-rooms. Built of sâl planks and thatch roof, out-houses, mud walls and thatch roof.	Do. do.	
	Do. ..	Do. ..	Khariguda ..	257 3 6	Do. do. do. ..	Do. do.	
	East Goomsur.	Do. ..	Gayagonda ..	751 15 10	Burnt bricks and thatch roof, 3 rooms 12 × 12 and 2 bath-rooms, out-houses of mud walls and thatch roof.	Do. do.	
	Do. ..	Do. ..	Jaganathprashad.	528 10 8	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Gundribadi ..	549 4 11	One room 20 × 20, one 20 × 10 and 2 bath-rooms. Built of sâl planks and thatch roof, out-houses walled with sâl planks and thatch.	Do. do.	
	Do. ..	Do. ..	Tilsingi ..	738 13 10	One room 20 × 20, one 20 × 10 and 2 bath-rooms. Built of sâl planks and thatch-roof, out-houses, mud walls and thatch.	Do. do.	
	Do. ..	Do. ..	Tarsingi ..	571 6 11	Do. do. do. ..	....	
	Do. ..	Do. ..	Bonta ..	558 8 6	Do. do. do. ..	....	
	Do. ..	Do. ..	Chandragiri ..	895 6 4	On piles. Built of sâl planks and thatch roof, 2 rooms 20 × 20 and 2 bath-rooms, out-houses, mud wall and thatch roof.	....	
	Suradá ..	Do. ..	Osurabanco ..	568 13 6	One room 20 × 20, one 20 × 10 and 2 bath-rooms. Built of sâl planks and thatch roof, out-houses, mud walls and thatch roof.	....	
	Bugudá ..	Do. ..	Kurcholy ..	* 438 2 8	Do. do. do. ..	....	* Amount adjusted up to 31st March 1892.
	Berhampore.	Do. ..	Berhampore ..	1,200 0 0	Rest-house sun-burnt bricks and thatch roof, 3 rooms and 2 bath-rooms, out-houses, mud walls and thatch.	Do. do.	Purchased.
	Do. ..	Office ..	Do. ..		Sun-burnt bricks and thatch roof, one room 20 × 20 and one side room.	Range office	Do.
	Do. ..	Rest-house ..	Padara ..	125 0 0	One room 12 × 12, mud walls and thatch roof	Inspection house for Range officer.	Built.
	Do. ..	Do. ..	Kukkarakhandi.	125 0 0	Do. do. do. ..	....	
	Golgonda ..	Depôt	Kondasantha ..	142 0 0	Two rooms 12 feet and 14 feet square. A covered shed 15½ feet × 50 feet. An open yard 15 feet × 50 feet. Walls of rooms of mud, the shed and yard enclosed by wood and bamboo fence. Rooms and shed thatched.	Used as depôt and also by Range officer.	

Vizagapatam.	Pálkonda ..	Inspection shed.	Dowvabai (Agency.)	206	0	0	40 feet × 36 feet, erected on sâl posts, wattle and darb walls and thatched roof.	By Inspecting officers ..	....
	Do. ..	Permit gumasta's houses (7.)	Throughout the range.	175	0	0	Mud and thatch, two rooms	By Permit gumastas. ..	Permanently occupied.
	Do. ..	Tannas (6.) ..	Do. ..	90	0	0	Do. do. one room	As tannas	Do.
	Bhadráchalam Subdivision.	Rest-house ..	Waddigudem ..	770	0	0	Thatched building raised on piles containing out-houses..	Used by Range officers ..	The cost includes the value of the wood.
	Do. ..	Do. ..	Mormur ..	700	0	0	Do. do. do. ..	Used by Inspecting officers ..	....
	Do. ..	Do. ..	Chintur ..	700	0	0	Do. do. do. ..	Do. do. ..	....
	Do. ..	Do. ..	Jiriguppa ..	700	0	0	Do. do. do. ..	Do. do. ..	....
	Do. ..	Do. ..	Singavaram ..	700	0	0	Do. do. do. ..	Do. do. ..	....
	Do. ..	Range-house ..	Marrigudem ..	400	0	0	Built of bamboos, walls plastered with mud and covered with thatch.	Used by Range officers. ..	....
	Do. ..	Revenue gumasta's shed.	Waddigudem ..	50	0	0	Do. do. do. ..	Used by Revenue gumasta ..	....
	Rajahmundry.	Do. ..	Kottapalli ..	20	0	0	Do. do. do. ..	Used by Permit gumasta ..	....
	Do. ..	Forest guards' shed.	Devancheruvu ..	46	0	0	Do. do. do. ..	Used by Forest guard ..	....
Godávari	Do. ..	Tanna shed ..	Nagulcheruvu ..	10	0	0	Covered with palmyra leaves	Do. Tanna peon	....
	Do. ..	Do. ..	Gokavaram ..	12	0	0	Do. do.	Do. do.	....
	Peddápuram.	Revenue gumasta shed.	Yeleswaram ..	20	0	0	Bamboo walls and thatched roof	Used by Permit gumasta ..	....
	Do. ..	Do. ..	Senkavaram ..	20	0	0	Do do.	Do. do.	....
	Do. ..	Forest guard's shed.	Ragavapuram ..	5	0	0	Thatched hut	Used by Ticket issuing gumasta.	....
	Do. ..	Do. ..	Vatangi ..	5	0	0	Do.	Do. do. ..	....
	Do. ..	Do. ..	Ankampalem ..	5	0	0	Do.	Do. do. ..	....
	Do. ..	Tanna shed ..	Bhanavaram ..	10	0	0	Do.	Do. by Tanna peon ..	....
	Do. ..	Do. ..	Murari	10	0	0	Do.	Do. do. ..	....
	Do. ..	Do. ..	Yeleswaram ..	10	0	0	Do.	Do. do. ..	....
	Yernagúdem delta.	Revenue gumasta's shed.	Mulagalam palli.	28	0	0	Thatched-house	Used by Permit gumasta ..	
	Do. ..	Tanna shed ..	Mogultur ..	20	0	0	Do.	Used by Tanna peon	
	Do. ..	Garden shed ..	Narsápur ..	10	0	0	Do.	Used by gardener	
	Do. ..	Do. ..	Bendamur lanka.	10	0	0	Do.	Do.	
	Vinukonda range.	Rest-house ..	Remidicherla ..	1,680	0	0	Tiled-house	By District Forest-officer on tour of inspection.	Tiled roof substituted this year at a cost of Rs. 480.
	Do. ..	Do. ..	Mellavagu ..	..			....	....	Transferred from Public Works Department.
	Do. ..	Do. ..	Ravulapuram ..	..				....	Do.
	Do. ..	Range office ..	Vinukonda ..	..			Thatched building	By District Forest-officer on tour of inspection.	In repairs.
Kistna.	Do. ..	Watcher's house.	Remidicherla ..	53	0	0		Watcher's residence	
	Do. ..	Gardener's house.	Do. ..	57	0	0	....	Gardener's residence	Do.
	Do. ..	Forest guard's house.	Berizipalli ..	62	0	0	....	Forest guard's residence ..	Do.
	Do. ..	Watcher's house.	Do. ..	51	0	0	....	Watcher's residence	Do.
	Bandar ..	Watcher's house.	Yelachentladibba.	25	0	0	....	Do.	....
	Do. ..	Do. ..	Nachugunta ..	25	0	0	....	Do.	....
	Do ..	Do. ..	Tummalapalem.	25	0	0	....	Do.	Requiring repairs.

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					NORTHERN CIRCLE—*cont.*		
				RS. A. P.			
	Bandar ..	Forest guard's house.	Gullalabodu ..	24 0 0	....	Forest guard's residence.	
	Do. ..	Do. ..	Wapakali ..	24 0 0	....	Do. ..	
	Do. ..	Do. ..	Lakchmipuram..	25 0 0	....	Do. ..	
	Do. ..	Tanna	Pedapalem ..	24 0 0	....	Office of the Line Inspecting guard.	Requiring repairs.
	Do. ..	Gardener's house.	Gopuvanipalem..	25 0 0	....	Used by gardener	Do.
	Do. ..	2 Do. ..	Weld plantation.	50 0 0	....	Do.	
	Do. ..	Do. ..	Allinagaram ..	5 0 0	....	Do.	In repairs.
	Do. ..	Forester's residence on tour.*	Do. ..	35 0 0	....	As residence of Inspecting officer.	
	Bápatla ..	Forest guard's house.	Kothapalem ..	30 0 0	....	Forest guard's residence.	
	Do. ..	Tanna	Do. ..	30 0 0	....	Tanna office.	
	Do. ..	Store-house ..	Do. ..	30 0 0	....	Forester's rest-house and office	
	Do. ..	Forest guard's house.	Lankavanidibba.	35 0 0	....	Residence of Forest guard.	
	Do. ..	Watcher's house.	Do. ..	35 0 0	....	Residence of watcher.	
	Do. ..	Tanna	Do. ..	35 0 0	....	Tanna office	In repairs.
	Do. ..	Store-house ..	Do. ..	35 0 0	....	By Foresters as office and rest house.	
	Do. ..	Watcher's house.	Adavuladivi ..	30 0 0	....	Watcher's residence	In repairs.
	Do. ..	Forest guard's house.	Perali	45 0 0	....	Forest guard's residence ..	Do.
	Do. ..	Tanna	Waderevu ..	3 0 0	....	Tanna office	Do.
	Sattenapalle range.	Rest-house ..	Bellamkonda ..	2,000 0 0	....	By District Forest-officer.	
Kistna—*cont.*	Do. ..	Forest guard's house.	Venkatayapalem.	36 0 0	....	On tour of inspection.	
	Do. ..	Do. ..	Turikipalli ..	35 0 0	....	Forest guard's residence.	
	Do. ..	Do. ..	Papayapalem ..	40 0 0	....	Do.	
	Do. ..	Do. ..	Mannesulland-palli.	40 0 0	....	Do.	
	Do. ..	Tanna	Yemmagigudem.	40 0 0	....	Tanna office and Forester's rest-house on tour.	
	Guntúr range.	Rest-house ..	Kondavid hill ..	1,000 0 0	....	By District Forest-officer on tour of inspection.	In repairs.
	Do. ..	Guard's house ..	Do. ..	50 0 0	....	Guard's residence.	
	Do. ..	Tanna	Guntúr	6 0 0	....	Tanna office	
	Do. ..	Do.	Kondavid reserve.	12 0 0	....	Do.	
	Bezváda range.	Rest-house ..	Kondapalli hill..	1,000 0 0	....	By District Forest-officer on tour of inspection.	
	Do. ..	Do. ..	Vellatur ..	..	....	Inspecting officer's residence.	Transferred from Public Works Department.
	Do. ..	Tanna	Kondapalli ..	25 0 0	....	Tanna office	Requires repairs.

		Do. ..	Forest guard's house.	Kondur ..	40	0	0	....	Forest guard's residence ..	In repairs.
		Do. ..	Gardener's house.	Kondapalli hill.	3	0	0	....	Gardener's shed	Requiring repairs.
		Palnád range.	Watcher's house.	Darripalli ..	18	0	0	....	Watcher's residence	Built in 1891–92.
		Muchukota.	Head-quarters bungalow and out-houses.	Anantapur {	6,000	0	0	Two stoned tiled building with 4 rooms, 2 dressing-rooms and bath-rooms; store-rooms, servants' quarters and stables.	Residence of District Forest-officer.	Rent paid at Rupees 23–4–10 per month.
				{	991	0	0			
		Dharmavaram.	Bungalow ..	Golla	1,500	0	0	Two rooms with bath-rooms, arched-roof	Inspection bungalow.	
			Range office and residence.	Dharmavaram ..	470	0	0	One large and 3 small rooms, flat-roof	Range officer's residence and office.	
	Anantapur.	Gooty ..	Bungalow ..	Páthakottacheru.	1,500	0	0	One large, 1 small room, 2 bath-rooms, tiled-roof; 2 rooms, flat-roof.	Inspection bungalow ..	Transferred from Local Fund Department—*vide* G.O., No. 263-L, dated 17th March 1891.
			Range office ..	Bukkapatnam ..	492	0	0	Two rooms, flat-roof	Range office.	
		Penukonda.	Rest-house ..	Konappanayanipalli.	800	0	0	Two rooms and bath-room, tiled-roof	Inspection bungalow.	
			Do. ..	Penukonda Hill.	500	0	0	Two rooms and 2 small rooms in buttresses of the old-fort; large rooms have thatched-roof.	Do.	
			Range-house ..	Sandúr	1,137	0	0	Flat soudu-roof with out-houses. It contains 5 rooms and a verandah.	Used by the Range officer.	
			Tool-shed ..	Do.	40	0	0	Flat soudu-roof	Used for keeping the tools of the Range officer.	
	Bellary..	Sandúr ..	Rest-house at Donemalai.	On the top of Donemalai	634	0	0	Thatched building with a big room and 2 bath-rooms and a verandah on three sides.	Rarely used by officers as there is no water near.	
			Tanna-shed, Kuditani.	Kuditani ..	13	0	0	Thatched building	Used as a Forest tanna.	
			Tanna-shed, Hospet.	Hospet ..	13	0	0	Do.	....	Now collapsed.
			Former head-quarters.	Nandyál ..	11,000	0	0	....	....	
			Rest-house ..	Rollapenta ..	1,200	0	0	....	....	
			.. ..	Balmuti ..	1,175	0	0	....	....	
			.. ..	Mantrala ..	650	0	0	....	....	
			.. ..	Busvapur ..	1,500	0	0	....	....	
			.. ..	Paniem ..	750	0	0	....	....	
			.. ..	Gazulapolem ..	375	0	0	....	....	
			.. ..	Chilama ..	600	0	0	....	....	
			Three Railway bungalows.	Do. ..	1,300	0	0	....	....	
	† Kurnool.	Nandyal..	.. ..	Adutla ..	375	0	0	....	....	
			Range office ..	Dornal ..	275	0	0	....	....	
			Rest-house ..	Kavidalagundem	75	0	0	....	....	
			.. ..	Mallalamma ..	130	0	0	....	....	
			.. ..	Rudrakodu ..	125	0	0	....	....	
			.. ..	Buggapenta ..	125	0	0	....	....	
			.. ..	Mantrala ..	150	0	0	....	....	
			.. ..	Peddacheruvu ..	125	0	0	....	....	
			.. ..	Uluda ..	50	0	0	....	....	
			.. ..	Chintel ..	100	0	0	....	....	
			.. ..	Chennupalle ..	100	0	0	....	....	

* Commenced during the year and Rs. 26 were spent on the same. Will be finished in the current official year.

† The Collector has not submitted the detailed list of buildings required for the Report. The most important ones as far as they are known are entered here.

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
				Rs. A. P.			
				CENTRAL CIRCLE.			
Nellore.		Udayagiri bungalow.	Udayagiri ..	Not given			
		Office building..	Srihárikot ..	Do.			
		Store-shed	Do. ..	890 0 0			
	Kódúr ..	Inspection bungalow.	Kódúr	2,500 0 0	Tiled roof with brick in chunam walls; tiled out-houses, 2 rooms 18 × 20, 2 dressing and 2 bath rooms, 2 verandahs.	Used by Superior officers on Inspection duty.	
		Rest-house ..	Balapalle ..	450 0 0	Thatched building with thatched out-houses; 1 room 20 × 20, 1 bath and 1 store room and 2 verandahs; walls stone in mud.	Used by Superior and Range officers on Inspection duty.	
		Do. ..	Magilipenta ..	850 0 0	Tin-roofed building with thatched out houses and stone in chunam walls; 1 room 12 × 12, 1 room 12 × 9, 2 bath-rooms 4 × 4.	Do. do. ..	
	Madanapalle.	Inspection bungalow.	Horsleykonda ..	3,500 0 0	Tiled building with tiled out-houses with brick and stone in chunam walls; 3 rooms 20 × 20, 2 dressing, 5 bath, 1 matie and 1 store room.	Used by Superior officers on Inspection duty.	
	Ráyachóti ..	Do. ..	Sanipaya ..	1,800 0 0	Thatched building with thatched out-houses and brick in mud walls; 2 rooms 16 × 12, 2 bath-rooms and 2 verandahs.	Do. do. ..	
	Sidhout ..	Do. ..	Vontimitta ..	1,400 0 0	Tiled building with tiled out-houses with brick in chunam walls; 2 rooms 18 × 20, 2 bath-rooms and 2 verandahs.	Do. do. ..	
	Kódúr ..	Office building..	Kodúr	145 0 0	Tiled building, 18 × 10, with stone in mud walls ..	Sub-Assistant and Kodúr range offices.	
	Ráyachóti.	Depôt house ..	Kurrapalle ..	200 0 0	Terraced roof with stone in mud walls; 1 room 17 × 20 and 1 yard 30 × 17.	Storing minor forest produce, timber, &c.	
		Do. ..	Polisettivandlapalle.	18 0 0	Thatched roof with stone in mud walls; 1 room 12 × 12.	Storing minor forest produce.	
		Range-house ..	Ráyachoti ..	445 0 0	Tiled roof with brick in mud walls; 1 room 12 × 10, 1 room 10 × 8, 3 small rooms 6 × 10 each.	Range officer's residence and office.	
	Sidhout ..	Do. ..	Sídhout ..	525 0 0	Tiled roof with thatched out-houses and brick in mud walls; accommodation as above.	Do. do..	
	Rajampet ..	Do. ..	Rájampet ..	365 0 0	Do. do. do. ..	Do. do.	
Cuddapah.	Badvél ..	Do. ..	Badvél ..	500 0 0	Do. do. do. ..	Do. do.	
	Kódur. ..	Do. ..	Kodúr ..	1,200 0 0	Tiled roof with tiled out-house and brick in chunam and mud walls; 3 rooms 13½ × 12, 1 bath-room 13½ × 6 and verandah on 3 sides.	Sub-Assistant Conservator's residence.	
	Sidhout ..	Depôt house ..	Vontimitta ..	250 0 0	Terraced building with stone in mud walls; 1 room 17 × 10 and 1 yard 30 × 17.	Storing minor forest produce and timber.	
	Váyalpád ..	Inspection bungalow.	Pílér	200 0 0	Thatched building, walls brick in mud; 2 rooms about 15 × 12 each, 2 bath-rooms, 1 front verandah, out-houses flat-roofed, 2 small rooms.	Used by Superior officers on Inspection duty.	
	Sidhout ..	Rest-house ..	Lankamalai ..	947 0 0	Tiled roof, walls stone in mud; 1 room 15 × 13, 2 bath rooms, front and back verandah, out-houses tiled, stone in mud, 2 rooms and 3 stalls.	Do. do.	

	Ráyachóti ..	Do. ..	Kortimadugu ..	915	0	0	As above, but 1 room 14 × 7 extra; out-houses as above.	Do. do.	
	Kódúr ..	Tannah-house ..	Kódúr	125	0	0	Tiled roof with stone in mud walls	Tannahdar's residence and store-room for perishable produce.	
	Kódúr, Sidhout, Badvél and Cuddapah.	Forest inspection sheds.	In eleven places.	312	0	0	Thatched roofs with stone in mud walls; generally 1 room 12 × 12 and bath-room.	Used by Superior and Range officers on Inspection.	
	Kódúr, Rájampet, Sidhout, Badvél, Proddutur, Cuddapah, Kadiri, Ráyachóti, Váyalpád, Madanapalle.	Forest Guards' and Tannahdars' huts.	In seventy-five places	1,036	0	0	Thatched roof with mud walls; generally 1 room 12 × 12 and verandah.	Guards' residence and tannahdars' docketing stations.	
	Kódúr, Rájampet, Badvél, Cuddapah.	Huts and shed in topes.	In seven places..	88	0	0	Thatched roofs with mud walls; generally 1 room 12 × 12 and verandah.	Used by Superior and Range officers on Inspection duty.	
Chingleput.		Range office ..	Nágalápuram ..	200	0	0	Main building and out-houses, tiled	Used as Range office.	
		Rest-house ..	Kambakkam Hill	300	0	0	Bungalow, kitchen, and stable, thatched	Used by Forest officers on circuit.	
	Tiruvallúr	Do. ..	Varadiapalayam.	200	0	0	Main building and out-houses, tiled	Do. do.	
		Range office ..	Sathiavedu ..	200	0	0	Do. do.	Used as Range office.	
		Rest-house ..	Periakuppam ..	341	0	0	Main building, tiled	Used by Forest officers on circuit.	Out-house not built.
	Chingleput.	Range office ..	Chingleput ..	1,000	0	0	House, tiled	Used as Range office.	Acquired from Public Works Department.
		Rest-house ..	Nellikuppam ..	742	0	0	Rest-house, tiled, with 3 huts	Used by Forest officers on circuit.	
North Arcot.	Chittoor ..	Rest-house ..	Paradarami ..	250	0	0	Thatched roof 26′ × 16′	Used by Forest officers.	
	Do. ..	Bungalow ..	Nangamangalam.	500	0	0	Do. 27′ × 30′	Do. do.	
	Do. ..	Range office ..	Chittoor	68	0	0	Tiled roof 21′ × 21′	Used for Range office ..	Given over by Public Works Department.
	Chandragiri.	Rest-house ..	Panapakam ..	100	0	0	Thatched roof 31′ × 30′	Used by Forest officers.	
	Do. ..	Inspection hut ..	Napier hut ..	20	0	0	Do. 12′ × 12′	Do. do.	
	Do. ..	Rest-house ..	Nagapatla ..	336	0	0	Do. 50′ × 33′	Do. do.	
	Do. ..	Do. ..	Mamandur ..	330	0	0	Do. 31′ × 31′	Do. do.	
	Do. ..	Big bungalow ..	Panapakam ..	437	0	0	Do. 50′ × 33′	Do. do.	
	Do. ..	Range office ..	Chandragiri ..	1,300	0	0	Tiled roof 28′ × 21′	Used for Range office.	
	Do. ..	Inspection hut ..	Tirupati hill ..	20	0	0	Thatched roof 12′ × 12′	Used by Forest-officers.	
	Palmanér ..	Bungalow ..	Naickanery ..	255	0	0	Tiled roof 40′ × 34′	Do. do. ..	Given over by District Board.
	Do. ..	Do. ..	Palmanér ..	1,000	0	0	Do. 53′ × 33′	Used for Ranger's quarters and office.	
	Do. ..	Rest-house ..	Do. ..	200	0	0	Thatched roof 40′ × 20′	Used by Forest-officers.	
	Do. ..	Do. ..	Peddúr ..	205	0	0	Do. 35′ × 24′	Do. do.	
	Do. ..	Do. ..	Nellipatla ..	100	0	0	Do. 24′ × 24′	Do. do.	

* The Collector has not submitted the detailed list of buildings required for the Report. The most important ones as far as they are known are entered here.

A detailed list of completed Forest buildings in the three circles with their approximate cost, &c.—*cont.*

CENTRAL CIRCLE—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
				RS. A. P.			
North Arcot. —*cont.*	Gudiyátam.	Rest house ..	Synigunta ..	150 0 0	Thatched roof 18′ × 25′	Used by Forest-officers.	
	Do. ..	Do. ..	Ammandi ..	30 0 0	Do 17′ × 12′	Do. do.	
	Do. ..	Do. ..	Tiruvallam block No. 3.	76 0 0	Do. 33′ × 33′	Do. do.	
	Do. ..	Do. ..	Virinjipuram block No. 4.	190 0 0	Do. 34′ × 34′	Do. do.	
	Do. ..	Do. ..	Virinjipuram block No. 3.	28 0 0	Do. 29′ × 25′	Used for Forester's quarters.	
	Vellore ..	Do. ..	Naickanery ..	40 0 0	Do. 24′ × 24′	Used by Forest-officers.	
	Do. ..	Do. ..	Ambur ..	180 0 0	Do. 35′ × 33′	Do. do.	
	Do. ..	Do. ..	Vódugathur ..	655 0 0	Tiled roof	Do. do.	
	Pólúr ..	Big bungalow ..	Amerdi ..	650 0 0	Thatched roof { 51′ × 31′ / 30′ × 30′	Used by District Forest-officer.	
	Do. ..	Small do. ..	Do. ..			Used by Range officer.	
	Do. ..	Bungalow ..	Mandaparai ..	1,556 0 0	Tiled roof 63′ × 22′	Used by District Forest-officer.	
	Do. ..	Big bungalow ..	Patrakada ..	377 0 0	Thatched roof { 52′ × 30′ / 29′ × 29′	Do. do.	
	Do. ..	Small do. ..	Do. ..			Used by Range officer.	
	Do. ..	Big do. ..	Karnatieghur ..	542 0 0	Do. 48′ × 27′	Used by District Forest-officer.	
	Do. ..	Small do. ..	Do. ..		Do. 32′ × 27′	Used by Range officer.	
	Do. ..	Big do. ..	Bagmarpet ..	704 0 0	Do. 70′ × 38′	Used by District Forest-officer.	
	Do. ..	Small do. ..	Do. ..		Do. 36′ × 21′	Used by Range officer.	
	Do. ..	Tannah house ..	Attimur ..	104 0 0	Do. 42′ × 27′	Used by Forest-officers.	
	Do. ..	Do. ..	Attuvambadi ..	156 0 0	Do. 42′ × 27′	Do. do.	
	Do. ..	Rest-house. ..	Santavasal ..	50 0 0	Do. 42′ × 27′	Do. do.	
	Do. ..	Bungalow. ..	Gangavaram ..	947 0 0	Tiled roof	Do. do.	
	Arcot ..	Do. ..	Kilurinnel ..	434 0 0	Thatched roof 58′ × 35′	Do. do.	
	Wálajá ..	Rest-house ..	Arkónam ..	529 0 0	Do. 16′ × 16′	Do. do.	
	Do. ..	Do. ..	Banavaram ..	510 0 0	Do. 16′ × 16′	Do. do.	
	Do. ..	Do. ..	Rar pet ..	205 0 0	Tiled roof 70′ × 30′	Used for Range office ..	Given over by Public Works Department.
	I. Tiruvannámalai.	Range office ..	Tiruvannámalai.	* 500 0 0	Tiled building with verandahs on two sides; walls brick in chunam. Its extent is about 2,400 square feet; has five rooms.	Used as Forest Range office and Sub-division Forest office	Not available for occupation by officers of other departments and private individuals.
	Do. ..	Tannah	Do. ..	30 0 0	Tiled building with mud walls, about 20′ × 10′ ..	Used as Permit Recovering office.	
	Do. ..	Rest-house ..	At foot of Kanuthimalai hills.	1,166 0 0	Tiled building with brick in chunam walls. Verandahs on two sides; has four rooms; extent 722½ square feet.	Used by Forest-officers when on inspection duty.	Available for use of officers of other departments.
	Do. ..	Depôt	Tukkapettai (Chengam).	555 0 0	Tiled building with brick in chunam walls. Verandahs on 4 sides; has four rooms; extent 1,441½ square feet.	Used as depôt and by Forest-officers when on inspection duty.	Do. do.
	Do. ..	Rest-house ..	Thenmalai ..	1,697 0 0	Tiled building with brick in chunam walls. Verandahs on two sides with 2 big rooms and kitchen and stables; extent 1,189¼ square feet.	Used by Forest-officers when on inspection duty.	Do. do.
	Do. ..	Tannah station.	Kolamanjanur on the Pennér bank.	..	....	....	Written off.

South Arcot.	II. Tindivanam.	Inspection shed.	Shanikulam ..	511 0 0	Tiled building with brick walls with verandahs on 2 sides and 3 rooms; extent 976¼ square feet.	Used by Forest officers when on inspection duty.	Available for use of officers of other departments.
	Do. ..	Rest-house ..	Do. ..	300 0 0	Tiled building with brick walls with verandahs on 4 sides and 4 rooms; extent about 1,440 square feet.	Permanently occupied as Forest Range office.	Not available for use of officers of other departments.
	Do. ..	Depôt	Tindivanam ..	50 0 0	Tiled building with mud walls with one room; extent about 150 square feet; has a narrow verandah.	Used as depôt when necessary.	Not fit to be used as a rest-house.
	Do. ..	Police bungalow.	Do. ..	Not known.	Tiled building with brick walls; has 3 rooms and 2 verandahs, about 1,500 square feet in extent.	Not used by Forest Department. At present lent to Salt Department for temporary occupation.	In need of great repairs. Not fit for permanent occupation. Handed over to forests by the Public Works Department.
	III. Villupuram.	Old Court-house.	Villupuram ..	Do. ..	Tiled building with brick in chunam walls and verandahs on two sides; has three rooms; extent about 1,200 square feet.	Permanently used as Forest Range office.	Not available for use of officers of other departments.
	VI. Kallakurchi.	Range office ..	Kallakurchi ..	1,327 0 0	Tiled building with brick in chunam walls and verandahs on 3 sides; has 3 rooms; extent 1,200 square feet.	Do. do. ..	Do. do.
	Do. ..	Rest-house ..	Kalpadi ..	† 450 0 0	Tiled building with brick in mud walls; has 3 rooms; extent 360 square feet.	To be used as a rest-house by Forest officers when on inspection duty.	Available for officers of other departments.
Tanjore.	Northern range.	Residence and Range office.	Tirumalaivasal..	292 0 0	Thatched building containing 6 rooms	As the Ranger's quarters and his office.	
	Kulitalai ..	Rest-house ..	Elamanur ..	...	Thatched building, 2 rooms and out-houses	Used by Inspecting officers ..	Value not known.
	Do. ..	Do. ..	Pudupalaiyam ..	1,000 0 0	Tiled building, 8 rooms and out-houses	....	Transferred from Local Fund Department.
	Do. ..	Do. ..	Kalpatti ..	150 0 0	Tiled building, 3 rooms and out-houses	....	
	Do. ..	Do. ..	Lalapet ..	80 0 0	Thatched, 2 rooms and out-houses	....	
	Do. ..	Do. ..	Kattalai ..	80 0 0	Do. do.	....	
	Musiri ..	Rest-house on the Pachamalai.	Singathipatti ..	477 0 0	....	....	
Trichinopoly.	Udayárpálaiyam.	Tannah ..	Ponparappi ..	15 0 0	....	....	
	Do. ..	Do. ..	Thavadanallur..	‡ 15 0 0	....	....	
	Do. ..	Do. ..	Kundaveli ..	‡ 15 0 0	....	....	
	Do. ..	Do. ..	Lower anicut ..	15 0 0	....	....	
	Do. ..	Do. ..	Madanathur ..	15 0 0	....	....	
	Do. ..	Do. ..	Tirumanur ..	‡ 15 0 0	....	....	
	Do. ..	Do. ..	Kilapalur ..	‡ 15 0 0	....	....	
	Do. ..	Range office ..	Jayankonda cholapuram.	230 0 0	Tiled building, 2 rooms and out-houses	....	
Salem ..	Salem East range.	Salem East Range office, including sandalwood godown.	Salem	2,875 0 0	Tiled roof with brick walls 59′ 6″ × 36′ 6″; 53′ 6″ × 29′ 7″, 70′ × 3′.	Salem East and West Range offices.	
	Do. ..	Husthampatti forest bungalow with out-house.	Husthampatti ..	Not known.	Tiled roof with brick walls 55′ × 38′ 3″ and 12′ × 18′; 36′ × 25′ 6″.	Dwelling-house rented.	
	Do. ..	Tannah shed on the Shevaroys.	On the Shevaroy Hills at Yercaud.	..	Tiled 20′ 3″ × 15′ 9″	Dwelling-house.	
	Do. ..	Tannah shed on the Kurambapatti.	Gollapatti road	83 0 0	Thatched 13′ 6″ × 10′ 6″	Tannah station.	
	Salem West range.	Mullapuram bungalow.	Near Mullapuram station.	Not known.	Tiled roof with brick walls, length 23½ yards, breadth 11½ yards.	Forest rest-house.	

* Excludes sums spent on petty repairs.

† Charges not yet adjusted.

‡ Fallen down.

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					CENTRAL CIRCLE—*cont.*		
Salem—*cont.*	Atúr range.	Atúr Forest Range office.	Atúr	390 0 0	Tiled roof with brick walls east to west 44 feet and north to south 25½ feet.	Forest Range office.	
	Do. ..	Atúr Sandy tope building.	Sandy tope, Atúr.	Not known.	Tiled east to west 4½ feet and north to south 20½ feet.	Not used.	
	Námakal range.	Námakal Forest Range office.	Námakal ..	Do.	Tiled 30′ × 27′	Forest Range office.	
	Do. ..	Do. out-house.	Do. ..	Do.	Thatched 27′ × 18′	Godown, kitchen and stable.	
	Uttankarai range.	Harur Forest Range office.	Harur	Do.	Tiled 26′ × 21′	Forest Range office.	
	Do. ..	Arbuthnot tope shed.	Do.	Do.	Do. 35′ × 22′	Not used.	
	Do. ..	Atkinson tope shed.	Do.	Do.	Do. 25′ × 10′	Do.	
	Do. ..	Thirthamalai tope shed.	Thirthamalai ..	Do.	Do. 35′ × 22′	Do.	
	Do. ..	Chitteri rest-house.	On the Chitteri Hills.	150 0 0	Thatched 27′ × 21′	Rest-house.	
	Tirupatúr range.	Tirupatúr Forest Range office.	Tirupatúr ..	1,359 0 0	Tiled 40′ × 38′	Forest Range office.	
	Do. ..	Alangayam tannah.	Alangayam ..	25 0 0	Thatched 12′ × 10′	Tanah station.	
	Do. ..	Andiappunoor tannah.	Andiappunoor ..	25 0 0	Do. 12′ × 10′	Do.	
	Do. ..	Pulianoor tannah.	Pulianoor ..	25 0 0	Do. 12′ × 10′	Do.	
	Do. ..	Alangayam rest-house.	Alangayam ..	210 0 0	Tiled 27′ × 21′	Rest-house.	
	Do. ..	Singarapet rest-house.	Singarapet ..	263 0 0	Do. 27′ × 21′	Do.	
	Krishnagiri range.	Maharajagadai rest-house.	Maharajahgadai.	200 0 0	Do. 27′ × 21′	Do.	
	Dharampuri range.	Dharampuri Forest Range office.	Dharampuri ..	Not known.	Do. 74′ × 22¾′	Forest Range office.	
	Do. ..	Pennagaram depôt.	Pennagaram ..	180 0 0	Do. 53′ × 18½′	Used as depôt.	
	Do. ..	Muthugampatti Forest bungalow.	Muthugampatti.	Not known.	Tiled 52′ × 15½′	Rest-house.	
	Hosúr Range.	Denkanikóta Forest Range office.	Denkanikóta ..	975 0 0	Do. 144′ × 140′	Forest Range office.	
	Do. ..	Guard's hut at Anchetti.	Anchetti ..	38 0 0	Thatched 31′ × 14′	Guard's residence.	
	Do. ..	Anchetti rest-house.	Do. ..	150 0 0	Do. 27′ × 21′	Rest-house.	

SOUTHERN CIRCLE,

Madura.	No. I, Cumbum Range.	Range officer's quarters and office.	Cumbum ..	1,256 0 0	The building is 45 feet long and 30 feet broad, the floor being 2 feet from ground level. The accommodation consists of one main room 15 × 12 feet, two side rooms 12 × 12 feet each with a bath-room of 12 × 6 feet. One of the side rooms is for office and behind it is another room 12 × 6 feet to be used for the custody of record, &c. There is also an out-house with kitchen 10 × 10 feet and stable. The foundation, basement and superstructure are all built of brick-in-mud and the roofing is with tiles, 1st-class wood being used for bressummers and wall plates. There is a verandah in front 45 × 6 feet. Batten doors and windows are fixed. The walls are plastered and white-washed.	For Range officer's residence and office.
	Do. ..	Forester's quarters.	Gúdalúr ..	694 12 0	The building consists of two rooms 10 × 10 feet each, one bath-room 10′ × 6′ feet, one office room 10 × 10 feet and one store room 10′ × 6′. There is a verandah in front 6 feet wide and a small verandah at the back. The walls are built of brick-in-mud and plastered and whitewashed. The roofing is made of 2nd-class wood and bamboo reapers and covered with tiles. Wooden doors and windows are used. This is fenced all round.	For the residence and office of the Forester.
	Do. ..	Rest-house ..	Vannathiparai ..	70 0 0	This consists of mud wall and thatched roof and is 18 feet square with a 5 feet verandah all round.	By the Range officer and the District Forest-officer when on inspection.
	Do. ..	Do. ..	Cumbum ..	70 0 0	Do. do. do. ..	By Range officer only when on inspection.
	Do. ..	Do. ..	Uthamapoliem ..	127 12 0	This consists of mud wall and thatched roof and is 18 feet square with a 5 feet verandah all round. There is also a kitchen.	Used hitherto as Range officer's residence and office.
	Do. ..	Do. ..	Combai ..	..	This is a pucca building with a terraced roof built of brick in mortar. It contains 2 rooms. It was formerly a Police station, on the abolition of which it was handed over to this department. Hence the cost of construction could not be known and has not been filled in.	Used by the Range officer and the District Forest-officer while on inspection.
	No. II, Palni Hill Range.	Range officer's quarters.	Kodaikánal ..	3,266 9 1	The building consists of 4 rooms measuring 12 × 12, 12 × 4, 12′ × 19½′ and 12′ × 9½′, respectively, 2 bath rooms 12 × 6 and 19½ × 6 and one store room 12 × 6 with verandah on 2 sides 6 feet wide. There are also kitchen, stables and godown, the first 12′ × 6′ and the latter 2, 6′ × 6′ each.	For Range officer's residence.
	Do. ..	Ranger's office.	Do. ..	..	One room, 14′ × 12′ is for office and another 10′ × 6′ is for the custody of records, &c. The walls are built of stone-in-mud and plastered and whitewashed. Roof consists of 1st-class vengai wood and is covered with Calicut tiles with the exception of kitchen, &c., the roofing of which is with corrugated iron sheets. Doors and windows are half glass and half pannelled.	The cost of this is included in that of Ranger's quarters.
	Do. ..	Range clerk's quarters.	Do. ..	356 9 0	This consists of 2 rooms measuring 17½ × 8 and 8 × 8 feet, respectively, with a verandah 11 × 11 feet. The walls are built of stone-in-mud and roofing is made of Calicut tiles.	For Range clerk's residence.
	Do. ..	Depôt - keeper's quarters, store-room, &c.	Gundan shola ..	892 14 0	This consists of 4 rooms, 3 of 10′ × 10′ each and 1, 8′ × 12′. Walls are built of stone-in-mud plastered and whitewashed. There is a 6 feet verandah in front. There is a passage dividing the rooms on each side and 2 rooms are set apart for office and store. The roofing is of 2nd-class wood and Calicut tiles. Doors and windows are all of wood.	....

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					SOUTHERN CIRCLE—*cont.*		
Madura —*cont.*	No. II, Palni Hill Range —*cont.*	Gardener's and driver's quarters and cattle-shed.	Gundan shola ..	RS. A. P. 884 7 5	Gardener's and driver's quarters consist of 8 rooms 8′ × 8′ each built with stone-in-mud and with thatched roof. Cattle shed consists of 3 rooms, 2 of 15 × 12 each and 1, 18 × 12, built of stone-in-mud with thatched roof and no doors.	For the purpose mentioned in column 2.	
	Do. ..	Building ..	Periyakulam ..	1,084 0 0	This consists of one room 20′ × 14′ and 2 store rooms 12′ × 12′ each with a verandah 7 feet wide on 3 sides. The walls are built with brick-in-chunam and the roofing is of 1st-class vengai wood and partly terraced and partly tiled. Doors and windows are all of wood, the latter having iron bars. Walls are plastered and whitewashed.	Used by the District Forest-officer and Range officer when on inspection.	
	Do. ..	Forester's quarters.	Balasamudram ..	500 0 0	Similar to Forester's quarters at Gúdalúr	Forester's residence.	
			Fence ..	41 9 6			
	Do. ..	Rest-house ..	Kookal ..	70 0 0.	This consists of only one room 14 × 14 with a 5feet verandah all round. The walls are of wattle and dale and the roof is thatched.	Used by Range officer while on inspection.	
	Do. ..	New rest-house.	Tandigudi ..	1,327 4 0	Consists of 2 rooms 12′ × 12′ and one room 12′ × 15′, 2 bath rooms 12′ × 9′ each with 6 feet verandah on 2 sides. There are also a kitchen and a store room with 2 stables. All are built of mud and stone with first-class Vengai timber and Calicut tiles and with doors and windows, half glass and half pannelled.	For the use of the District Forest-officer and officers of other departments when on tour.	
	Do. ..	Rest-house ..	Poombarai ..	80 0 0	This consists of only one room 14′ × 14′ with a 5 feet verandah all round. The walls are of wattle and dale and roof is thatched.	Used by Range officer while on inspection.	
	Do. ..	Do. ..	Moolayur ..	70 0 0	This also consists of only one room, but it is 16 feet square with a 5 feet verandah all round. The walls are of mud and whitewashed and the roofing is thatched.	Used by Range officer while on inspection and also by the District Forest-officer, occasionally by officers of other departments.	
	Do. ..	Do. ..	Periyur ..	70 0 0	Do. do. do. ..	Used by the Range officer when on circuit.	
	Do. ..	Do. ..	Viruputchi ..	40 0 0	Only one room 20′ × 12′ with mud walls and a 6 feet verandah in front and one kitchen 12′ × 6′. The roof is thatched.	Do. do.	
	Do. ..	Do. ..	Kavalapatti ..	116 1 11	This consists of a room 18′ × 18′ with mud walls and a 5 feet verandah all round and has only a thatched roof.	Do. do.	
	Do. ..	Do. ..	Davadanapatti ..	70 0 0	This consists of a room 15 feet square and is in other respects similar to that at Kavalapatti.	Do. do.	
	No. III, Kanavoipatti Range.	Range officer's quarters and office.	Kanavoipatti ..	1,129 10 8	Similar to the Range-officer's quarters and office at Cumbum, except that junglewood is used for bressummers, &c.	For Range officers' residence and office.	
	No. IV, Palamedu Range.	Rest-house ..	Sirumalai ..	70 0 0	This is 15 feet square with mud walls and thatched roof and is in a dilapidated condition.	....	

	Do. ..	New rest-house.	Do. ..	224 0 0	The rest-house is 30 × 28 feet and consists of one main room 12 × 12 feet and a bath room 12 × 6 feet and a 6 feet verandah on 3 sides. There is an out-house consisting of a kitchen 10 × 10 feet. The building is of rough stone-in-mud plastered and whitewashed with a thatched roof. There are 4 doors and 2 windows to the main building and 1 door and 1 window to the kitchen.	Used by the Range officer and the District Forest - officer when on inspection.	
	Do. ..	Range officer's quarters and office.	Palamedu ..	1,124 13 6	Similar in description to the Range officer's quarters and office at Cumbum, except that junglewood is used for bressummers, &c.	For Range officer's quarters and office.	
	Southern Range.	Rest-house ..	Kalivelipil ..	1,440 0 0	Building with plank roof consisting of 1 hall, 2 rooms and bath rooms and verandah on 3 sides. Length 39′ 6″, breadth 39′ 6″.	Rest-house	4,000 feet above sea level.
	Do. ..	Do. ..	Kannikatu ..	1,850 0 0	Tiled building consisting of 2 rooms and bath rooms, 1 hall and 2 verandahs. Length 44′ 2″, breadth 31′ 2″.	Do.	2,550 feet.
	Do. ..	Coolie-shed ..	Do. ..	50 0 0	Thatched shed consisting of 2 compartments. Length 23′ 3″, breadth 12′ 0″.	For coolies employed on works.	
	Do. ..	Forester's bungalow.	Do. ..	520 0 0	Building with plank roof consisting of 4 rooms and a front verandah. Length 56′ 6″, breadth 23′ 9″.	For Ranger, Foresters, guards and watchers.	
	Do. ..	Out-house and kitchen.	Do. ..	240 0 0	Thatched building consisting of 2 rooms and 2 stables. Length 28′ 0″, breadth 9′ 9″.	Kitchen and stable.	
	Do. ..	Rest-house ..	Oollar	75 0 0	Building with thatched roof consisting 2 rooms and a verandah all round. Length 37′ 0″, breadth 27′ 0″.	Forester's rest-house	2,000 feet.
	Do. ..	Do. ..	Kariar (upper)..	90 0 0	Thatched building consisting of 2 rooms and bath rooms and 2 verandahs. Length 31′ 0″, breadth 27′ 0″.	Rest-house	700 feet.
	Do. ..	Do ..	Kariar (lower).	75 0 0	Building with thatched roof consisting of 2 rooms and a verandah all round. Length 34′, breadth 24′.	For Forest Guard and Watchers.	
	Do. ..	Do. ..	Tharivattam-parai.	36 0 0	Thatched building consisting of 2 rooms. Length 35′, breath 26′.	Forest Guard's rest-house.	
	Do. ..	Forest officer's bungalow.	Mundanthorai	2,500 0 0	Thatched building, upper storied. Length 41′ 6″, breadth 33′ 6″.	Rest-house	Burnt 27th September 1891.
Tinnevelly.	Do. ..	Do. ..	Do. ..	200 0 0	Tiled building upper storied. Length 41′ 6″, breadth 33′ 6″.	Do.	In course of construction.
	Do. ..	Forester's rest-house.	Do. ..	Made from savings.	Round building consisting of 1 room and verandah all round. Circumference 103′ 6″, longest diameter 38′, short diameter 21′.	Forester's rest-house.	
	Do. ..	Hut	Do. ..	Do. ..	Thatched building consisting of 1 room, 1 kitchen and a verandah in front. Length 21′, breadth 19′.	Forest guard's rest-house.	
	Do. ..	Do.	Do. ..	Do. ..	Thatched building consisting of 1 room, 1 verandah kitchen, and 1 verandah in front. Length 24′, breadth 19′.	Permit gumastah's house.	
	Do. ..	Bazaar	Do. ..	Do. ..	Thatched building consisting of 2 rooms and a verandah in front. Length 32′, breadth 30′.	Bazaar.	
	Do. ..	Hut	Do. ..	Do. ..	Thatched building consisting of 1 room and 1 verandah in front. Length 15′, breadth 13′.	Dhonyman's hut.	
	Do. ..	Stable	Do. ..	Do. ..	Thatched building consisting of 2 compartments. Length 26′, breadth 15½′.	Stable.	
	Do. ..	Kitchen ..	Do. ..	..	Thatched building consisting of 2 rooms. Length 37′, breadth 15′.	Kitchen.	
	Do. ..	Closet	Do. ..	Made from savings.	Without roof. Length 10′, breadth 6¾′	Closet.	
	Do. ..	Depôt	Vikramasinga-puram.	35 0 0	Thatched building consisting of 2 rooms and 1 front verandah. Length 21′ 8″, breadth 16′ 3″.	Timber depôt.	
	Do. ..	Rest-house ..	Sivasylam ..	213 0 0	Thatched building	..	Burnt February 1892.
	Do. ..	Sub-Assistant Conservator's bungalow.	Ambásamudram.	Not known.	Tiled building consisting of 8 rooms and 1 hall. Length 58′, breadth 31′.	Rest-house.	Transferred from Police Department.

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					SOUTHERN CIRCLE—*cont.*		
Tinnevelly—*cont.*	Southern Range.	Sub-Assistant Conservator's office.	Ambásamudram.	Rs. A. P. 284 0 0	Tiled building consisting of 1 room; length 24′, breadth 18′.	Office.	
	Do. ..	Rest-house ..	Sengalteri ..	275 0 0	Thatched building consisting of 1 hall, 1 bath-room and verandah on 4 sides; length 27′, breadth 27′.	Rest-house.	
	Do. ..	Forester's office.	Kalacad ..	315 0 0	Tiled building consisting of 2 halls, 1 record-room, 1 bath-room, 1 front verandah and a small back verandah; length 34′, breadth 24′.	Ranger's office.	
	Do. ..	Mothalaruppan .	Mothalaruppan .	Under 200 0 0	Thatched building consisting of 2 rooms and 1 bath-room; length 25′ 6″, breadth 21′ 3″.	Rest-house.	
	Northern Range.	Rest-house ..	Virusadikidai ..	200 0 0	Thatched building consisting of 1 hall, 1 bath-room and verandahs on all 4 sides; length 20′, breadth 20′.	Do.	
	Do. ..	Out-house ..	Do. ..	56 0 0	Thatched building consisting of 2 rooms; length of each 12′, breadth of each 8′.	Kitchen.	
	Central Range.	Rest-house and office.	Vasudevanallur..	500 0 0	Tiled building consisting of 1 hall, 1 verandah room, 2 corner rooms and verandahs on 3 sides; length 31′, breadth 29′.	Rest-house.	
	Do. ..	Out-house ..	Do. ..	..	Thatched building consisting of 2 rooms, 1 bath-room and verandahs on 2 sides; length 23′, breadth 18′.	Office.	
	Do. ..	Rest-house ..	Kotantheri ..	375 0 0	Thatched building consisting of 1 room, 1 bath room and verandahs on 2 sides, length 27½′, breadth 27½′.	Rest-house.	
	Do. ..	Do. ..	Thalayanai ..	Under 200 0 0	Thatched building consisting of 1 room, 1 bath room and verandahs on 2 sides; length 33′, breadth 24′.	Do.	
	Do. ..	Do. ..	Kannimarkoil, Puliyangudi hills.	200 0 0	Thatched building consisting of 1 room, 1 bath room and verandahs on 2 sides; length 23′, breadth 22′.	Do.	
	Do. ..	Do. ..	Parliyar Kadayanallur hills.	200 0 0	Thatched building consisting of 1 room, 1 bath room and verandahs on 2 sides; length 29′, breadth 26′.	Do.	
	Do. ..	Do. ..	Courtallum ..	737 11 0	Tiled building consisting of 3 rooms and 2 bath-rooms; length 38¼, breadth 28¼.	Do.	
	Do. ..	Kitchen ..	Do. ..	51 0 0	Tiled building consisting of 3 rooms; length 40′, breadth 11′.	Kitchen.	
	Do. ..	Out-house ..	Do. ..	348 0 0	Tiled building consisting of 6 rooms; length 36′, breadth 20½′.	Office and godown.	
	Satyamangalam.	Ranger's quarters and store-room.	Satyamangalam .	..	Walls are of mud with tiled roof	....	Transferred from Local Fund Department.
	..	Inspecting officer's residence.	Talamalai ..	250 0 0	30′ long and 12′ broad with mud walls and tiled roof ..	Used by Inspecting officers.	
	..	Do. ..	Ekkatur ..	250 0 0	32′ by 15′ with walls built of mud and tiled roof ..	Do. do.	
	..	Residence of Forester.	Talavadi ..	250 0 0	16′ long by 8′ broad with mud walls and tiled roof. ..	Used as Forester's residence.	
	..	Inspecting officer's residence.	Hassanur ..	350 0 0	40′ long by 12½′ broad	Used by Inspecting officers.	Do.

North Coimbatore.	..	Do. ..	Markampolliem	670	0	0	44′ long by 16′ broad with mud walls and tiled roof ..	Do. do.	
	..	Do. ..	Karalia ..	670	0	0	Do. do. do. ..	Do. do.	
	..	Do. ..	Geddesal ..	....			....	....	Do. do.
	..	Do. ..	Gairmallam ..	800	0	0	44′ long by 16′ broad with mud walls and tiled roof ..	Used as Inspecting officer's residence.	
	Kollegál ..	(*a*) Residence and (*b*) Range office.	Kollegál ..	890	0	0	With mud walls and tiled roof. (*a*) 51′ × 13′ (*b*) 22′ × 12′.	For the use of the Range officer and his office.	Erected by the department.
	Do. ..	Inspecting officer's residence.	Kowdally ..	250	0	0	33½′ long by 16½′ broad with mud walls and tiled roof ..	As residence of Inspecting officers.	
	Do. ..	Do. ..	Bylur	400	0	0	Walls are of mud with tiled roof	Do. do.	
	Do. ..	Do. ..	Ponnachi ..	310	0	0	41′ long by 15′ broad with mud walls and tiled roof ..	Do. do.	
	Do. ..	Do. ..	Alambady ..	310	0	0	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Hannur ..	350	0	0	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Thalabetta ..	570	0	0	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Gopinatham ..	570	0	0	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Changadi ..	250	0	0	33½′ long by 16½′ broad with mud walls and tiled roof ..	Do. do.	
	Bhaváni Range. ..	Ranger's quarters and store-room.	Bhaváni ..	650	0	0	41′ long by 15′ broad with mud walls and tiled roof ..	Do. do.	
	Do. ..	Do. ..	Tamarakarai ..	350	0	0	Do. do. do. ..	Do. do.	
	Metupalaiyam.	Inspection shed.	Tekkampatti ..	..			....	....	The Collector has not submitted the detailed list of buildings.
	No. I Range	Residence and office.	Mount Stuart ..	..			....	....	
South Coimbatore.	No. II Range.	Do. ..	Settumalai ..	..			....	....	
	No. VII Range.	Do. ..	Alanthorai ..	..			....	....	
	Do. ..	Do. ..	Bolampatti ..	..			....	....	
	No. VIII Range.	Do. ..	Nonkarai ..	..			....	....	
	Do. ..	Do. ..	Sholakarai ..	..			....	....	
	Mudumalai.	Inspection house.	Benne	713	0	0	A building of the Godávari standard plan on 3′ piles constructed of wood with thatched roof.	Used as a residence of the Inspecting officer.	
	Do. ..	Do. ..	Mudumalai ..	844	0	0	A building of the Godávari standard plan on 3′ piles constructed of wood with thatched roof.	Do. do.	
	Do. ..	Range house ..	Benne	580	0	0	A building of the Godávari standard plan on 3′ piles constructed of wood with slight modifications.	Occupied by the Ranger.	
	Do. ..	Ranger's hut ..	Mudumalai ..	400	0	0	A thatch hut with bamboo tattee walls plastered with mud.	Used as a residence of the Ranger when on tour.	
	Do. ..	Do. ..	Tippakadu ..	40	0	0	Do. do. do. ..	Do. do.	
	Do. ..	Forester's hut ..	Benne	40	0	0	Do. do. do. ..	Occupied by the Forester.	
Nílgiris.	Do. ..	Clerk's hut ..	Do.	48	0	0	Do. do. do. ..	Occupied by the Clerk.	
	Do. ..	Guard's hut ..	Do.	20	0	0	Do. do. do. ..	Occupied by the Guard.	
	Do. ..	Do. ..	Mudumalai ..	20	0	0	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Tippakadu ..	30	0	0	Do. do. do. ..	Do. do.	
	Seegur Range.	Range office ..	Musnigudi ..	312	0	0	An old building of brick and mortar roof and walls, bought and repaired.	Used as an office by the Range officer.	
	Do. ..	Range hut ..	Kalhatti ..	220	0	0	Thatch hut with mud walls	Occupied by the Range officer.	
	Ootacamund.	Ranger's haulting shed.	Bikapathy ..	53	0	0	Thatch hut with tattee walls plastered with mud	Used as a residence of the Ranger when on tour.	
	Do. ..	Depôt hut ..	Ootacamund ..	100	0	0	Tiled roof, walls plastered with mud	Occupied by the Watcher.	
	Do. ..	Guard's hut ..	Bikapathy ..	75	0	0	Thatch hut with tattee walls plastered with mud	Occupied by the Guards of the respective beats.	

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					SOUTHERN CIRCLE—*cont.*		
				Rs. A. P.			
	Ootacamund —*cont.*	Guard's hut ..	Avalanche ..	60 0 0	Thatch hut with tattee walls plastered with mud	Occupied by the Guards of the respective beats.	
	Do. ..	Do. ..	Dodabetta ..	110 0 0	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Cairn hill ..	110 0 0	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Aramby ..	110 0 0	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Governor's shola	110 0 0	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Bikkatti ..	90 0 0	Do. do. do. ..	Do. do.	
	Do. ..	Gardener's hut.	Lovedale ..	53 0 0	Do. do. do. ..	Occupied by the gardener.	
	Coonoor range.	Inspection and rest-house.	Ralliah	360 0 0	A wooden house with tiled roof including stables	Used as a residence by the officers of the Forest Department when on tour.	
	Do. ..	Do. ..	Kullar	1,807 0 0	A wooden house with zinc roof including stables and out-houses.	Do. do.	
	Do. ..	Seed-house ..	Sim's Park ..	265 0 0	A wooden house with thatch roof	Used as a place for storing seeds.	
	Do. ..	Range hut ..	Kótagiri ..	220 0 0	A hut with tiled roof and mud walls	Occupied by the Forester.	
Nílgiris —*cont.*	Do. ..	Do. ..	Kartary ..	200 0 0	Do. do.	Do. do.	
	Do. ..	Guard's hut ..	Ralliah	83 0 0	Thatch huts with mud walls	Occupied by the Guards of the respective beats.	
	Do. ..	Do. ..	Brooklands ..	80 0 0	Do. do.	Do. do.	
	Do. ..	Do. ..	Bandy shola ..	83 0 0	Do. do.	Do. do.	
	Do. ..	Do. ..	Denad	80 0 0	Do. do.	Do. do.	
	Do. ..	Do. ..	Kodanád ..	80 0 0	Do. do.	Do. do.	
	Do. ..	Do. ..	Hulikal	90 0 0	Do. do.	Do. do.	
	Do. ..	Do. ..	Kolakombe ..	90 0 0	Do. do.	Do. do.	
	Do. ..	Do. ..	Deva shola ..	80 0 0	Do. do.	Do. do.	
	Do. ..	Do. ..	Melúr	90 0 0	Do. do.	Occupied by the Guard.	
	Do. ..	Gardener's hut.	Sim's Park ..	80 0 0	Do. do.	Occupied by the gardener.	
	Do. ..	Store-room ..	Ralliah	40 0 0	Do. do.	Used for storing charcoal.	
	Do. ..	Depôt hut ..	Coonoor ..	559 0 0	A pucka brick building with hat roof	Used as office by the Depôt-keeper and as residence of the watcher, and also as store-room of the range.	
	Do. ..	Gardener's hut.	Bethhope ..	23 0 0	Thatch roof with mud walls	Occupied by the gardener.	
	Manantoddy	Residence ..	Manantoddy ..	12,377 0 0	Built of burnt bricks and teakwood, partly iron roofed under Mangalore tiles. Consists of 11 rooms and a verandah in front 50′ 5″ wide and a portico. Rooms are of the following dimensions:—19′ 7″ × 9′; 16′ 4″ × 18′ 10″; 16′ 4″ × 7′ 11″; 18′ 10″ × 15′ 10″; 15′ 10″ × 7′ 11″; 7′ 11″ × 7′ 11″; 15′ 11″ × 17′ 11″; 16′ 5″ × 7′ 10″; 16′ 11″ × 8′; 16′ × 8′; 7′ 10″ × 7′ 10″.	Residence for District Forest-officer.	District Forest-officer pay rent of Rs. 25 per mensem.
	Do. ..	Stables ..	Do. ..	1,039 0 0	Built of burnt bricks and teakwood and tiled; has 6 rooms, one of 16′ 3″ × 10′ 2″ and 5 rooms of 10′ × 8″ 2′ each.	Used for tying horses and bullocks; and as residence of servants.	
	Do. ..	Cook room ..	Do. ..	604 0 0	Built of burnt bricks and teakwood and tiled; has 4 rooms and a verandah in front 5′ 10″. The rooms are 15′ × 12′, 12′ × 12′, 15′ 4″ × 4′ and 12′ × 4′.	Used as cook room and store.	

	Do. ..	Old office ..	Do. ..	669	0	0	There are 3 rooms of 22′ × 11′ 9″; 25′ × 16′ 10″; 9′ 10″ × 6′ 10″ with verandah on three sides 8′ wide.	Used as record rooms.	
	Do. ..	New office ..	Do. ...	651	0	0	Has 2 rooms of 20′ × 13′ and 12′ × 13′ with 8′ verandah in front and back, 16′ 3″ × 10′ 2″.	Used as office.	
	Do. ..	Gardeners' house	Do. ..	42	0	0	Has a room 16′ 3″ × 10′ 2″	Residence of gardener of the Manantoddy Experimental Farm.	
	Do. ..	Seed-house ..	Do. ..	264	0	0	Built of teakwood and burnt bricks with glazed roof of 15′ 2″ × 10′ 8″ in dimension.	For raising plants.	
	Begur ..	Rest-house ..	Begur ..	1,143	0	0	Walled with teak planks and tiled, consists of two rooms of 16′ 2″ × 12′ and 11′ 8″ × 12′ and 4′ verandah in front.	Residence and office for the Range officer.	Was built by Mr. Peet in 1874 or 1875 at a cost of Rs. 1,000. It was a shingled one. It has been tiled at a cost of Rs. 142–13–1.
	Do. ..	Residence ..	Do. ..	574	0	0	Consists of 2 rooms 10′ × 10′ and a verandah all round 3′ wide.	Rest-house for the District Forest-officer.	
* North Malabar—*cont.*	Do. ..	Elephant shed ..	Do. ..	602	0	0	It is of 58′ × 19′	Stabling elephants as well as residence for mahouts.	
	Do. ..	Mahout lines ..	Do. ..	561	0	0	Four rooms, each being 12′ × 9′		
	Do. ..	Store ..	Do. ..	375	0	0	Has one room 20′ × 12′ and another by 12′ × 12′ and verandah in front 3′ wide.	Storing provisions for elephants.	
	Brammagiri.	Rest-house ..	Brammagiri ..	1,026	0	0	Forest lodge built of rock and clay and roofed with iron; has 3 rooms, 14′ 3″ × 14′ 2″, 14′ 3″ × 14′ 2″ and 10½′ × 7′ with 4′ verandah in front.	Rest-house for District Forest-officer and Range officers for inspection.	
	Do. ..	Kitchen ..	Do. ..	197	0	0	Iron roofed and built of stone, bricks, &c., of 18′ 4″ × 11′ with a verandah 4′ 8″ in front.	Used as kitchen.	
	Tirunelly ..	Forest guard's station.	Tirunelly ..	376	0	0	Built of mud with teak roof and tiled; has a room 17½′ × 9½′ with 5′ verandah all round.	Residence for Forest Guard.	
	Kakkery ..	Do. ..	Kakkery ..	242	0	0	Has a room 12′ × 12′ with verandah in front of 4′ wide; has the roof tiled.	Do. do.	
	Kaikaty ...	Do. ..	Kaikaty ..	230	0	0	Do. do. do. ..	Do. do.	
	Kartikolum.	Do. ..	Kartikolum ..	230	0	0	Do. do. do. ..	Do. do.	
	Kuppadi ..	Residence and office.	Kuppadi ..	2,319	0	0	Built of sun-dried bricks and iron roofed; has 8 rooms, 2 of them being 14′ 6″ square, the other 2 being 14′ 3″ × 6′ 9″ and the remaining 4 being 6′ 9″ square each.	Residence and office for Range officer.	
	Dindinial ..	Do. ..	Dindinial ..	1,080	0	0	A bungalow with kitchen, &c., stable, built of burnt bricks and a different kinds of wood and tiled; has 11 rooms of 8¾′ × 8½′, 21′ × 8½′, 16½′ × 8½′, 16½′ × 8½′, 8½′ × 8½′, 13′ × 18¾′, 16¾′ × 18¾′, 16¾′ × 16¾′, 16½′ × 27¼′, 13¼′ × 8½′, 8½′ × 8½′ in dimensions with 2 verandahs 34′ × 16¼′, 8½′ × 18¾′ and a porch 17′ × 21′ in front.	Rest-house for the District Forest-officer and Range officer.	Purchased from Messrs. Alston and Company.
	Mukkie ..	Do. ..	Mukkie ..	488	0	0	Wooden serambi, tiled; has 2 rooms 10′ square with a 3′ verandah all round.	Residence and office for Range officer.	
	Kanot ..	Do. ..	Kanot ..	416	0	0	Wooden serambi, tiled, bottom closed with sun-dried bricks; has 2 rooms of 10′ feet square each and a 4′ verandah all round.	Do. do.	
	Nilambur ..	Inspection shed.	Panangod ..	190	0	0	Wooden serambi with tiled roofing; has a big room ..	Used as inspection shed by the District Forest-officer, Range officer and Foresters.	
	Do. ..	Do. ..	Amarampalam ..	100	0	0	Wooden serambi with thatched roof; and has a room ..	Do. do.	
South Malabar.	Do. ..	Office and residence.	Nilambur ..	5,000	0	0	A tiled bungalow built of laterite stone; has 6 rooms ..	Ranger's quarters and Range office.	
	Do. ..	Office ..	Do. ..	2,000	0	0	Tiled house built of laterite stone; has 2 rooms	Used as South Malabar District Forest-office.	
	Do. ..	Residence ..	Nilambur hill ..	13,469	0	0	One storied tiled bungalow with out-houses built of laterite stone; consists of 4 rooms, a store and a pantry.	District Forest-officer's quarters.	
	Do. ..	Office and rest-house.	Kallai ..	541	0	0	Serambi with tiled roofing built of timber and has 2 rooms.	Used as depôt office and rest-house for subordinates.	

* NOTE.—The Collector has not submited the detailed list for the year. The list furnished by him for 1890–91 has therefore been inserted here and should not be considered complete.

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost. Rs.	A.	P.	Description of building and accommodation available.	How used.	Remarks.
				SOUTHERN CIRCLE—*cont.*					
South Malabar—*cont.*	Amarampalam.	Rest-house ..	Karumpoya ..	240	0	0	Serambi with thatched roof built of timber, and has 2 rooms.	Rest-house for District Forest-officer and Range officer.	
	Do. ..	Do. ..	Nellikuttta ..	100	0	0	Serambi with thatched roof built of timber, and has only 1 room.	Do. do.	
	Do. ..	Do. ..	Korampoya ..	250	0	0	Serambi with thatched roof built of timber and has 2 rooms.	Do. do.	
	Do. ..	Residence ..	Neerattikadava.	48	0	0	Serambi with thatched roof built of timber, and has only 1 room.	Amarampalem Range officer's quarters.	
	Pálghat Range.	Rest-house ..	Karimala ..	1,234	0	0	Bungalow having two rooms built of sun-dried bricks with iron roofing.	Used by the District Forest-officer and Range officer as rest-house.	
	Do. ..	Do. ..	Walayar ..	2,710	0	0	Tiled bungalow with out-houses, 3 rooms and 2 bath rooms and built of rough stone.	Rest-house for District Forest-officers of South Malabar and South Coimbatore.	
	Do. ..	Residence ..	Do. ..	655	0	0	Tiled house with 2 rooms built of rough stone	Forester's quarters (Walayar).	
	Do. ..	Do. ..	Do. ..	25	0	0	Thatched building built of bamboo tatties ; has a room ..	Forest guard's quarters (Walayar).	
	Do. ..	Office	Pálghat ..	..			Tiled bungalow (old Munsifs' court) with 4 rooms and built of bricks.	Pálghat Range office	Transferred from Public Works Department.
	Do. ..	Inspection shed.	Dhoni ..	117	0	0	A thatched building with out-houses, is built of bamboo tatties, and has a room.	Used by the District Forest-officer and Range officer.	
	Coondapoor.	Forest hut ..	Sabladi reserve.	111	0	0	A rectangular building 34′ × 18′ × 10′ high with two rooms, one large and one small, with verandah on two sides and one door and two windows to each. Built of mud with a thatched roof.	Newly rebuilt and not occupied yet, but intended for the permanent residence of watcher and rest-house for Range officer.	The building requires white-washing to complete it.
	Do. ..	Tanna ..	Wandse ..	66	0	0	Is of oblong shape, the longer side being 26′ × 15′ broad. Has two rooms, the larger one 13′ × 12½′ broad and the smaller one 7′ × 12½′. Has two verandahs 4′ broad on the northern and southern sides. Walls of mud, and roof thatched.	As tanna by Wandse Tannadar.	Built in 1885 and windows added in 1890.
	Udipi ..	Forest hut ..	Pilarkan reserve.	75	0	0	The main building is 31′ long × 20′ broad. Contains two rooms, one 17¾′ × 12′ and the other 12′ × 8¾′ with a verandah 5′ broad facing east. Each room has two doors and two windows. The walls are of mud and 8½′ high 1½′ thick. There is an additional room to the south-west 5½′ square with one door. The roof is a thatched one.	Forest rest-house	The windows and doors are without shutters.
	Do. ..	Tanna	Someshwar ..	..			..	As tanna	The building is in a decayed state and estimate received for reconstruction.
	Mangalore ..	Do.	Bunda, Mangalore town.	..			Is a mud and tiled building 20′ 4″ × 15′ 4″ with one room 12′ 4″ × 7′ 9″ and verandah on the south and west.	Do.	
	Do. ..	Do.	Jeppu, Mangalore town.	..			Is a mud and tiled building 18′ × 13′ 3″ consisting of one room 8′ 7″ × 10′ 1½″ and one verandah 13′ 3″ × 5′ 4″.	Do.	
	Do. ..	Do.	Kauttavadi do.	..			Is a mud and tiled building 19′ × 12′ 11″ consisting of one room 10′ 8″ × 7′ 5″ and one verandah 11′ 5″ × 5′ 11″.	Do.	

South Canara.	Do.	Do.	Police hospital, Mangalore town.	..	Is a mud and tiled building 16′ 10″ × 13′ 8″ consisting of one room 7′ 9″ × 9′ 7″ and one verandah 6′ × 11′ 9″.	Do.	
	Do.	Do.	Bijai, Mangalore town.	..	Is a mud and tiled building 16′ 9″ × 13′ 5″ consisting of one room 7′ 9″ × 10′ 4″ and one verandah 6′ 2″ × 10′ 3″.	Do.	
	Do.	Do.	Kadiri, Mangalore town.	...	Is a mud and tiled building 16′ 3″ × 13′ 2″ consisting of 1 room 7′ 4″ × 10′ 1″ and verandah 6′ 4″ × 11′.	Do.	
	Do.	Do.	Urwa, Mangalore town.	..	Is a mud and tiled building 17′ 1″ × 13′ 1″ consisting of 1 room 8′ 1″ × 10′ 4″ and verandah 6′ 1″ × 10′ 6″.	Do.	
	Do.	Forest hut	Ullal plantation.	..	....	Residence of gardener	
	Do.	Do.	Tannir Bhavi plantation.	..	....	Do. do.	
	Uppinangadi.	Tanna	Jalsur	17 0 0	Built of mud with a thatched roof; is 21′ long and 15′ broad and 7′ high; contains 2 rooms each 12′ × 10′ with a verandah 27′ × 4′.	As tanna	
	Do.	Do.	Uppinangadi (Kadikar village).	30 0 0	Is a mud and thatched building 28′ long 15½′ broad and 7½′ high; contains 2 rooms one 11′ × 11′ and the other 18′ × 4½′ with 2 verandahs one 9½′ × 12′ and the other 18′ × 4½′.	Do.	
	Do.	Do.	Puttur	39 0 0	Is a mud and thatched building 21′ long 16¾′ broad and 7′ high, containing 2 rooms 10½′ × 10′ and 19′ × 4′ with 2 verandahs 12′ × 5½′ and 12′ × 2′.	Do.	
	Do.	Range office	Do.	..	Is built of stone with a tiled roof and is 49′ long 33½′ broad and 13½′ high and contains 3 rooms 31½′ × 25′, 12′ × 12′ and 12′ × 7′ with one verandah on the east 12′ × 7′ and one on the north 12′ × 7′.	As Range office	Was formerly Munsif's Court and was taken over by the department in 1889–90.
	Do.	Tanna	Siradi	23 0 0	Is a mud and thatched building 28′ long, 12′ broad and 9′ high, containing 2 rooms 10′ × 10′ and 20′ × 6′ with one verandah 19′ × 10′ and another 28′ × 3′ and a portico.	As tanna	
	Do.	Do.	Charmadi	..	Is a mud and thatched building 28′ × 12′ × 9′, containing one room 19′ × 10′ with 2 verandahs 19′ × 10′ and 28′ × 3′.	Do.	
	Kásaragód.	Forest hut	Parappa teak plantation.	100 0 0	Is built of mud and has a thatched roof. It is 31½′ × 18′ and consists of 2 rooms 16′ × 12′ and 12′ × 12′ with verandah on 3 sides.	Residence for watcher and rest-house for Range officer.	

APPENDIX E.

From E. P. POPERT, Esq., Conservator of Forests, Central Circle, to the Secretary to the Commissioners of Land Revenue, dated Tindivanam, 24th September 1892, No. 1315.

[*Reference.*—Board's Proceedings, Forest No. 93, dated 25th February 1892.]

In reply to the above, I have the honour to state the low average realized in this Circle for the lower classes of timber and fuel cannot be ascribed to either of the causes suggested by the Government of India, but is chiefly due to the seigniorage rates fixed by Government and which are the rates paid by the purchaser in the forest.

2. The sales of wood direct to purchasers in this Circle may be divided into three classes—

(*a*) Fuel for railways, mines and large towns;
(*b*) Small timber for local requirements; and
(*c*) Fuel locally consumed.

3. With regard to (*a*), the supply to railways is the principal item and the rate of sale is not an expansive one. Coal is entering more largely into competition with wood fuel, and the latter is only taken when it can be delivered at a comparatively cheaper rate than coal. The net profit upon these transactions never exceeds, or can be expected to exceed, one anna per cubic foot.

4. With regard to (*b*), the local Government has fixed the rates for small timber extracted from unreserved forests, and it is generally understood that this rate is not to be exceeded when complying with the local requirements of the ryots (practically the only demand in this Circle) from reserved forests. This rate is either 4 annas or 2 annas per head-load (Rs. 5 and 2–8–0 per cart-load) according to the species. A cart-load is taken to represent 25 cubic feet, so that in these cases the net rate paid is equivalent $3\frac{1}{5}$ and $1\frac{3}{5}$ annas per cubic foot, respectively. As a matter of fact a cart-load contains more than 25 cubic feet, so that this amount is in excess of the rate actually paid.

5. With reference to (*c*), local fuel supply, which forms a large proportion of the revenue from unreserved forests, the maximum rate fixed by the local Government for green fuel is the same as in the preceding paragraph, but for dead-wood the rate is 3 pies per head-load or 5 annas per cart-load of 25 cubic feet, which is equal to $2\frac{2}{5}$ pies per cubic foot. For green fuel extracted from reserved forests the seigniorage rate is never exceeded; in some districts, for instance North Arcot, South Arcot and Salem, a lower rate is charged.

6. From the last paragraph it will be seen that the remark of the Board, in paragraph 16 of Resolution, Forest No. 433, dated 14th October 1891, that 4 pies per cubic foot was assuredly not the rate at which the ryot could obtain fuel, is incorrect in as far as it applies to the extraction of dead-wood from unreserved forests; and in the Salem district, for instance, until lately ryots have been allowed to remove green fuel from coupes cut by Government at one pie per head-load, and even now are paying only 3 pies per head-load, both rates considerably less than 4 pies per cubic foot.

From J. W. CHERRY, Esq., Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue, dated Coimbatore, 18th August 1892, No. 2168.

[*Reference.*—Board's Proceedings, Forest No. 93, dated 25th February 1892.]

From information received from the districts, I am able to reply as follows in the matters referred to in paragraphs 7 and 10 of the above.

* * * * *

Paragraph 10.—About low prices realized for the lower classes of timber and fuel.

Tinnevelly.—It is not considered that the prices are low on comparing the rates charged in Zemin and Travancore forests which are close by, and where the prices are even lower than the Government rates.

Madura.—Timber and fuel removed by purchasers are charged at the seigniorage rates. As regards the material cut departmentally, none of the lower classes of timber were sold. Those of higher classes (except teak in Surangaṇar where the average price was only 8 annas per cubic foot) were sold at fair prices. The falling-off in the above teak sample was due to the fact that out of the total quantity of 352 cubic feet sold, 200 were lateral branches and fetched only Rs. 17 out of Rs. 177 for the lot.

The low price for fuel was in consequence of the abolition of the permit system. There was a great opposition and combination against the departmental sales, and in order to break this down, and secure a sale at all, it was necessary to take whatever was offered.

North Coimbatore.—The market rates are low, but it is thought that as the present rates give wood-sellers very little profit, to raise the rates would affect the demand and cause a loss of revenue.

The Collector remarks that, except in specially favored localities, the existing seigniorage rates are certainly high enough.

South Coimbatore.—It is difficult to name the causes except that people will not pay higher rates, and unless the timber is sold for what it will fetch in the market, our depots will very soon be overstocked.

Nilgiris.—The low prices realized for timber in Mudumalai and Benne were due to the competition of the Mysore, Pilpally and Coorg forests, which are in a position to undersell our produce as they are near to Mysore and Bangalore which are the main markets.

As regards fuel, it was due to the very great private competition that exists in consequence of the overplanting of Eucalyptus, by which the supply has far outstripped the demand.

North Malabar.—The seigniorage rates for the lower classes of timber and fuel cannot be raised, as the demand is already almost *nil* owing to the extent of private forests.

South Malabar.—No timber and fuel was sold to ryots at low prices as there was no demand from that quarter. They were sold only to trading merchants at market rates which are higher than the seigniorage rates.

South Canara.—Seigniorage rates were charged for timber and fuel removed on permit. As regards timber and fuel cut departmentally, the cause of the slight fall in the price of miscellaneous timber in logs was due to the absence of much demand at Mangalore, and a discount of 10 per cent. was given to stimulate the sale, yet the total number sold was 357 logs against 394 in 1889–90.

As regards fuel, the reduction was chiefly due to the casuarina firewood which did not realize as much as in 1889–90, because there was a reduction in the tile manufacture for which this wood is mostly consumed in the town.

ANNUAL FORM No. 59-A.

Forest Department, Madras Presidency.

AREA of Reserved Forests, 1891-92.

District.	Range.	Name of Forest.	AREA ON 1ST APRIL 1891.		ADDED DURING THE YEAR.	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 31ST MARCH 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	NORTHERN CIRCLE.									
Ganjam.	West Goomsur.	Dimrijholi	5,486	...	...	...	5,486	...	.....	
	East Goomsur.	Jaganathprasad ...	26,200	...	...	...	26,200	...	.....	
		Chondragiri ...	...	...	18,320	...	18,320	...	No. 366 of 1st July 1891.	
	Suradá ...	Bondagocha ...	4,400	...	...	...	4,400	...	.....	
		Malati ...	1,720	...	...	...	1,720	...	.....	
		Dabuki	1,450	...	...	...	1,450	...	.....	
		Vinjagiri	6,000	...	...	...	6,000	...	.....	
	Buguda...	Panchbuthia ...	4,320	...	...	...	4,320	...	.....	
		Vishnuchakram ..	4,860	...	...	...	4,860	...	.. ...	
		Total ...	54,436	85·05	18,320	...	72,756	113·68		
Vizagapatam.	Sarvasiddhi.	Peddapalle	2,520	...	6,440	...	8,960	...	.....	Rectification of area.
		Total ...	2,520	3·93	6,440	...	8,960	14·		
Godávari	Delta ...	Narasápur	114	...	..	...	114	...	.....	
		Coringa	7,000	...	...	...	7,000	...	.....	
		Bendemurlanka ...	362	...	..	..	362	...	.....	
	Bhadrá-chalam.	Pulsumamidi ...	4,520	...	...	...	4,520	...	.....	
		Marigura	44,500	...	...	...	44,500	...	.. ...	
		Mattapalli	9,500	...	...	...	9,500	...	.....	
		Nelakota	2,500	...	...	...	2,500	...	.....	
		Komanpalli	3,250	...	...	...	3,250	..	.....	
	Rékapalle.	Bandroe	10,900	...	...	...	10,900	...	.....	
		Golagupá	8,000	...	...	...	8,000	...	.....	
		Narakonda	7,500	...	...	...	7,500	...	.....	
		Pengha	4,400	...	...	...	4,400	...	.....	
		Upanapali	3,300	...	...	...	3,300	...	.....	
		Tatlanka	12,000	...	...	...	12,000	...	.....	
		Ramachendram ...	10,300	...	...	...	10,300	...	.....	
		Rapak	7,000	...	...	...	7,000	...	.....	
		Sitarampuram ...	3,000	..	...	...	3,000	...	.....	
		Bhandargudem ...	7,100	...	...	...	7,100	...	.....	
		Burkankota ...	1,500	...	...	...	1,500	...	.....	
		Lakkavaram ...	6,500	...	...	...	6,500	...	.....	
		Kallem	6,500	...	...	...	6,500	...	.....	
	Ellore ...	Chintalapudi ...	2,000	...	...	...	2,000	...	.....	
		Tadikalapudi ...	2,500	...	...	...	2,500	...	.....	
		Bandamcherla ...	5,200	...	...	...	5,200	...	.....	
		Erraguntapalli ...	8,640	...	...	...	8,640	...	.....	
		Velagalapalli ...	2,200	...	...	...	2,200	...	.....	
	Bhadrá-chalam.	Mulkanapalle ...	3,658	...	...	...	3,658	...	.....	
		Dummagudem ...	6,110	...	...	...	6,110	...	.....	
		Arlagadem ...	6,136	...	...	...	6,136	...	.....	
		Tunikicheruvu ...	8,022	...	...	...	8,022	...	.....	
		Bhadráchalam ...	10,860	...	...	...	10,860	...	.....	
		Gogubaka	1,666	...	...	...	1,666	...	.....	
		Barrikonda	3,500	...	...	...	3,500	...	.....	
	Peddápur ...	Murari	700	...	...	...	700	...	.....	
	Rékapalle...	Kanslur	...	...	6,200	...	6,200	...	No. 124 of 21st March 1891.	

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		NORTHERN CIRCLE—*cont.*								
Godávari—*cont.*	Peddápur ..	Kovida	...	...	1,280	...	1,280	..	No. 151 of 7th April 1891.	
	Tuni Division.	Veligogula	...	...	12,000	...	12,000	...	No. 215 of 27th April 1891.	
		Sarlanka	...	...	15,000	...	15,000	...	No. 241 of 2nd April 1891.	
		Raghavapatnam ...	...	...	3,600	...	3,600	...	No. 240 of 2nd April 1891.	
		Anantávaram ...	...	...	4,000	...	4,000	...	No. 242 of 2nd April 1891.	
		Totapalli	...	...	2,150	...	2,150	...	No. 208 of 27th April 1891.	
	Ellore ...	Ramasingavaram ...	...	...	2,500	...	2,500	...	No. 167 of 13th April 1891.	
		Total ...	220,938	345·22	46,730	...	267,668	418·23		
Kistna.	Bandar ...	Kara	21	...	...	...	21	...	.....	
		Vanudhuru	64	...	...	...	64	...	.....	
		Bomminampadu ...	26	...	...	...	26	...	.....	
		Vemavarampadu ...	16	...	...	...	16	...	.....	
		Allinagaram ...	125	..	...	...	125	...	.....	
		Bandar Fort ...	7,500	.	...	...	7,500	...	.....	
		Kodur	50	...	...	...	50	...	.....	
		Gollapalem	390	...	...	...	390	...	.....	
		Sorlagondi	2,880	...	...	...	2,880	...	.....	
		Yella chetladibba ...	4,640	...	...	...	4,640	..	.....	
		Konukollu	667	...	...	...	667	...	.....	
		Nachugunta ...	8,640	...	...	...	8,640	...	.....	
		Weld	...	...	75	...	75	...	No. 430 of 21st Sept. 1891.	
		Palakayatippa ...	...	...	3,320	...	3,320	...	No. 491 of 20th Oct. 1891.	
		Gopuvanipalem ...	...	...	206	...	206	...	No. 549 of 9th Dec. 1891.	
	Bezváda...	Gavuravaram ...	84	...	...	...	84	...	.....	
		Bezváda	300	...	...	...	300	...	.....	
		Gunadala	400	...	...	...	400	...	.....	
		Kondapalli extension	1,225	...	...	...	1,225	...	.....	
		Budavada ...	4,650	...	...	...	4,650	...	.....	
		Jaggayapet ...	4,570	...	...	...	4,570	...	.....	
		Kothur	...	...	7,230	...	7,230	...	No. 222 of 2nd May 1891.	
		Kondur	....	...	4,140	...	4,140	...	No. 31 of 15th Jan. 1892.	
	Guntúr ...	Nidamarru	383	...	...	...	383	...	.....	
		Karlapudi	994	...	...	...	994	...	.....	
		Narakodur	515	...	...	...	515	...	.....	
		Kuragallu	1,305	...	...	...	1,305	...	.....	
		Tadépalli	2,305	...	...	...	2,305	...	.....	
		Kondavid	12,857	...	...	...	12,857	...	.....	
		Gollamudi	...	...	194	...	194	...	No. 14 of 19th Dec. 1891.	
	Sattenapalli.	Konanki	3,600	...	...	...	3,600	...	.....	
		Bellamkonda ...	1,380	...	...	...	1,380	...	.....	
		Venkatayapalem ...	46,201	...	3,000	...	49,201	...	No. 428 of 21st Sept. 1891.	
		Nevalipuri	...	...	11,500	...	11,500	...	No. 196 of 16th April 1891.	
	Vinukonda	Bellapalli ...	40,000	...	...	...	40,000	...	.....	
		Kakerala	17,520	...	...	...	17,520	...	.....	
		Guthikonda ...	...	...	37,760	...	37,760	...	No. 228 of 8th May 1891.	
	Palnád ...	Tummurukodu ...	24	...	...	...	24	...	.....	
		Gangalakunta ...	24,461	...	...	...	24,461	...	.....	
		Madinapad ...	9,600	...	...	...	9,600	...	.....	
		Laukavanidibba ...	4,480	...	...	...	4,480	...	.....	
		Kothapalem No. I ...	3,840	...	...	...	3,840	...	.....	
		Dindi	600	...	...	...	600	...	.....	
		Adavuladivi ...	610	...	..	...	610	...	.....	
		Bápatla No. I ...	245	...	...	...	245	...	.....	
		Do. No. II ...	1,032	..	...	...	1,032	...	.....	

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Northern Circle—*cont.*									
Kistna—*cont.*	Paluád—*cont.*	Karlapalem No. I ...	105	...	...	...	105	...	.....	
		Do. No. II...	208	...	...	...	208	...	.....	
		Vedullapalli ...	166	...	10	...	176	...	No. 387 of 1st Sept. 1891.	
		Muthayapalem ...	9,569	...	...	...	9,569	...	.....	
		Pandillapalli ...	162	...	...	...	162	...	.....	
		Waderévu	82	...	...	...	82	...	.....	
		Kothapalem No. II ..	3,100	...	...	...	3,100	...	.....	
		Nayanapalli ...	...	...	152	...	152	...	No. 190 of 16th April 1891.	
		Orr's Reserve ...	...	...	128	...	128	...	No. 550 of 9th Dec. 1891.	
		Total ...	221,592	346·24	67,715	...	289,307	452·04		
Anantapur.	Gooty ...	Khojjapalle ...	367	...	...	25	342	...	.....	By survey.
		Pamidi	...	...	640	...	640	...	No. 401 of 12th Sep. 1891.	
	Muchukota.	Anantapur ...	131	...	...	2	129	...	.....	By survey.
	Penukonda.	Narasampalle ...	1,250	...	930	...	2,210	...	.....	Do.
		Kottakota	5,120	...	5,896	...	11,016	...	.....	Do
		Neiradykonda ...	...	...	2,217	...	2,217	...	No. 427 of 21st Sep. 1891.	
	Dharmavaram.	Boodikonda A & B ...	...	...	1,275	...	1,275	...	No. 429 of 21st Sep. 1891.	Block B transferred from Bellary—*vide* Notification No. 226 of 15th May 1891, in *Fort St. George Gazette*, dated 19th May 1891.
	Hindupur...	Somarajupalai ...	1,920	...	195	...	2,115	...	.....	By survey.
		Total ...	8,818	13·78	11,153	27	19,944	31·16		
Bellary.	Bellary ...	Timmapuram ...	1,046	...	...	...	1,046	...	.....	
		Tekkalakota ...	600	...	...	...	600	...	.....	
		Bellary	8,000	...	...	...	8,000	...	.....	
		Tornagallu	2,100	...	...	...	2,100	...	.....	
		Halikota	...	...	640	...	640	...	No. 413 of 14th Sept. 1891.	
		Kurugodu, West ...	...	...	750	...	750	...	No. 548 of 9th Dec. 1891.	
		Do. North-west	...	...	250	...	250	...	No. 460 of 15th Oct. 1891.	
		Rayadurgam ...	...	...	6,000	...	6,000	...	No. 148 of 7th April 1891.	
		Mincheri	4,000	...	...	...	4,000	...	.....	
		Aduguppa	950	...	...	...	950	...	.....	
		Boodikonda B. ...	...	...	966	*966	...	...	No. 384 of 1st Sept. 1891.	
	Sandúr.	Joga	3,264	...	...	...	3,264	...	.....	
		Gollalingammanahalli.	1,000	...	...	...	1,000	...	.....	
		Gundu	...	...	5,456	...	5,456	...	No. 107 of 11th Mar. 1891.	
		Somalapuram ...	2,600	...	...	...	2,600	...	.....	
		Tummaraguddi ...	2,500	...	...	...	2,500	...	.....	
	Kúdligi.	Shivapuram ...	9,000	...	...	...	9,000	...	.....	
		Chiribi	3,000	...	...	...	3,000	...	.....	
		Sunkadakallu ...	7,000	...	...	...	7,000	...	.....	
	Adóni ...	Halvi	1,209	...	...	...	1,209	...	.....	
		Halekota	438	...	...	...	438	...	.....	
		Gummanur (N., N.E., N.W.).	646	...	...	...	646	...	.....	
		Yeruru (S., S.W., W.)	522	...	...	...	522	...	.....	
		Chippigiri (S., S.E., W.).	1,160	...	...	...	1,160	...	.....	
		Degalahalu	110	...	...	...	110	...	.....	
		Nandavaram ...	...	...	958	...	958	...	No. 27 of 15th Jan. 1892.	
		Katalam	...	...	658	...	6·8	...	No. 526 of 24th Nov. 1891.	

* Transferred to Anantapur District—*vide* Notification No. 226 of 15th May 1891 in *Fort St. George Gazette*, dated 19th May 1891.

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Northern Circle—*cont.*									
Bellary —*cont.*	Adóni ...	Banavasi	...	...	2,109	...	2,109	...	No. 533 of 24th Nov. 1891.	
		Badanahalu	...	...	940	...	940	...	No. 384 of 1st Sept. 1891.	
		Total ...	49,145	76·79	18,727	966	66,906	104·54		
Kurnool.	Sirvel ...	Sirvel	116,730	...	...	...	116,730	...	.....	
	Cumbum..	Veligondas, South ...	16,755	...	...	...	16,755	...	.....	
		Do. North ...	21,540	...	...	...	21,540	...	.....	
		Uyyalavada ...	...	...	76,800	...	76,800	...	No. 154 of 7th April 1891.	
	Nandyál and Nandikótkur.	Nandyal	...	...	185,700	...	185,700	...	No. 168 of 13th April 1891.	
		Nandikótkur ...	...	...	256,000	...	256,000	...	No. 197 of 16th April 1891.	
	Rámallakót.	Rámallakót, East ...	...	...	1,000	...	1,000	...	No. 289 of 22nd June 1891.	
		Do. West...	...	...	1,000	...	1,000	...	No. 293 of 22nd June 1891.	
		Lanjabanda ...	...	...	2,000	...	2,000	...	No. 457 of 15th Oct. 1891.	
		Yaperlapad ...	...	...	3,384	...	3,384	...	No. 43 of 15th Jan. 1892.	
		Gadidamadugu ...	...	...	2,891	...	2,891	...	No. 116 of 21st March 1891.	
		Total ...	155,025	242·23	528,775	...	683,800	1,068·44		
		Total of the Circle ...	712,474	1,113·24	697,860	993	1,409,341	2,202·09		
	Central Circle.									
Nellore.	Ongole ...	Kottapatam ...	147	...	...	...	147	...	.....	
		Kanuparti	520	...	...	...	520	...	.....	
		Ongole Hill ...	60	...	...	...	60	...	.....	
	Kandukúr	Ramapatam Casuarina Plantation.	60	...	...	...	60	...	.....	
		Chagollu	1,010	...	...	...	1,010	...	.....	
		China Laterapi ...	1,548	...	...	...	1,548	...	.....	
		Ravur	2,187	...	...	...	2,187	...	.....	
		Chakicherla ..	323	...	...	...	323	...	.....	
		Ramapatam ...	1,516	...	...	...	1,516	...	.....	
		Boddipudi ...	500	...	...	...	500	...	.....	
		Gudlur	3,297	...	...	...	3,297	...	.....	
		Macherla Chelamcherla.	...	..	12,236	..	12,236	...	No. 189 of 16th April 1891.	
	Kávali ...	Tummalapenta ...	100	...	...	...	100	...	.....	
		Maddurpaud ...	2,012	...	...	...	2,012	...	.....	
		Zaladanki, East ...	600	...	...	...	600	...	.....	
		Do. West ...	1,254	...	...	...	1,254	...	.....	
		Tummalapenta, South	392	...	...	...	392	...	.....	
		Dharmavaram ...	189	..	...	...	189	...	.....	
		Zammalapalem ...	1,130	...	...	...	1,130	...	.....	
		Rudrakóta	2,100	...	...	...	2,100	...	.....	
		Gattupalli	838	...	...	...	838	..	.....	
		Gollapalem	960	...	...	...	960	...	.....	
		Tallapalem	848	...	...	...	848	...	.....	
		Manubolupaud ...	1,192	...	...	...	1,192	...	.....	
		Chinna Annalur ...	3,400	...	...	...	3,400	...	.....	
		Kávali	2,000	...	...	...	2,000	...	.....	
		Dundigam	515	...	...	...	515	...	.....	
		Chamadala	750	...	...	...	750	...	.....	
		Zakkepalli—Gudur...	800	...	...	...	800	...	.....	
		Nagalavaram ...	414	...	...	...	414	...	.....	
		Tummalapenta, West	2,280	...	...	...	2,280	...	.....	
		Bitragunta	1,908	...	...	...	1,908	...	.....	
		Narayanapuram ...	2,392	...	...	...	2,392	...	.....	
		Kesavaram	908	...	...	...	908	...	.....	
		Tummalapenta, North.	...	...	1,300	...	1,300	...	No. 546 of 9th Dec. 1891.	
	Nellore ...	Iskapalle	23	...	...	...	23	...	.....	
		Kandamur	1,520	...	...	...	1,520	...	.....	
		Kakutur	480	...	...	...	480	...	.....	
		Dontali	1,280	...	...	...	1,280	...	.....	

Area of Reserved Forests, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Central Circle—*cont.*										
Nellore—*cont.*	Nellore—*cont.*	Chemudugunta ...	320	...	...	...	320	...	.....	
		Utukur-Varni Casuarina Plantation.	607	...	...	...	607	...	.....	
		South Mopur ...	1,000	...	...	...	1,000	...	.....	
		Kottapalli	4,230	...	...	...	4,230	...	.....	
		Marripad	1,400	...	...	...	1,400	...	.....	
		Turimerla	620	...	...	...	620	...	.....	
		Allipuram	125	...	...	...	125	...	.....	
		Amencherla, East ...	960	...	...	...	960	...	.....	
		Do. West...	480	...	...	...	480	...	.....	
		Vavveru	2,970	...	...	...	2,970	...	.....	
		Dagadarti	2,866	...	...	...	2,866	...	.....	
		Kondlapudi	...	...	1,500	...	1,500	...	No. 532 of 24th Nov. 1891.	
	Gúdúr ...	Dugarázpatnam ...	1,200	...	...	...	1,200	...	.....	
		Kanupur, East ...	960	...	...	...	960	...	.....	
		Vendodu	818	...	...	...	818	...	.....	
		Idagali	480	...	...	...	480	...	.....	
		Vodur	883	...	...	...	883	...	.....	
		Gúdúr	950	...	...	...	950	...	.....	
		Tammenapatam Casuarina Plantation.	485	...	...	...	485	...	.....	
		Cherukumudi ...	640	...	...	...	640	...	.....	
		Vellipedu	720	...	...	...	720	...	.....	
		Chillakur	460	...	...	...	460	...	.....	
		Vinduru	300	...	...	...	300	...	.....	
		Nellaballi	275	...	...	...	275	...	.....	
		Kadived, South ...	450	...	...	...	450	...	.....	
		Do. North ...	468	..	...	...	468	...	.....	
		Ankalapatur ...	240	...	...	...	240	...	.....	
		Pidatalapudi ...	750	...	...	...	750	...	.....	
		Madamanur ...	560	...	...	...	560	...	.....	
		Kanupur, West ...	1,974	..	...	...	1,974	...	.....	
		Ipur	1,033	...	...	...	1,033	...	.....	
		Survepalli	2,750	...	...	...	2,750	...	.....	
		Momidi	...	...	2,500	...	2,500	...	No. 169 of 13th April 1891.	
		Tamenapatam, West.	...	...	350	...	350	...	No. 172 of 13th April 1891.	
		Yellasiri	...	...	2,518	...	2,518	...	No. 173 of 13th April 1891.	
		Vedicherla	...	...	850	...	850	..	No. 414 of 16th Sept. 1891.	
	Atmakúr.	Telugurayapuram ...	763	...	...	...	763	...	.....	
		Srikolanu	1,521	...	...	...	1,521	...	.....	
		Chejerla	1,121	...	...	...	1,121	...	.....	
		Tirrupukambampad.	861	...	...	...	861	...	.....	
		Bommavaram ...	3,000	...	...	...	3,000	...	.....	
		Prabhagiripatnam ...	2,500	...	...	...	2,500	...	.....	
	Rápúr ...	Turrimerla	640	...	...	...	640	...	.....	
		Pulikollu	740	...	...	...	740	...	.....	
		Morapur	3,130	..	...	...	3,130	...	.....	
		Todaru	750	...	...	...	750	...	.....	
		Vutukur	725	...	...	...	725	...	.....	
		Duggunta	1,200	.	...	...	1,200	...	.....	
		Mogallur	957	...	...	...	957	...	.....	
		Ayyavaripalem ...	320	...	...	...	320	...	.....	
		Chikavolu	1,100	...	...	...	1,100	...	.....	
		Chittalur	515	...	...	...	515	...	.....	
		Nellapalli	2,100	...	...	...	2,100	...	.....	
		Turupupundla ..	1,000	...	...	...	1,000	...	.....	
		Vavintaparti ...	1,300	...	...	...	1,300	...	.....	
		Tummalatalpur ...	4,000	...	...	...	4,000	...	.....	
		Chaganam	1,500	...	...	...	1,500	...	.....	
		Vadlapudi	2,400	...	...	...	2,400	...	.....	
		Biradavolu	2,250	...	...	...	2,250	...	.....	
		Paluru	...	...	210	...	210	...	No. 117 of 18th Mar. 1891.	
		Griddalur	...	...	700	...	700	...	No. 119 of 21st Mar. 1891.	
		Potukonda	...	...	1,860	...	1,860	...	No. 134 of 3rd April 1891.	

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Nellore—*cont.*	Rápúr—*cont.*	Marellakonda ...	..	...	400	...	400	...	No. 326 of 14th July 1891.	
		Guttikonda	...	...	180	...	180	...	No. 383 of 1st Sept. 1891.	
		Kummaragunta ...	...	...	440	...	440	...	No. 415 of 16th Sept. 1891.	
		Kakalakonda ...	...	...	1,850	...	1,850	...	No. 431 of 21st Sept. 1891.	
		Rápur Veligonda, A & B.	...	...	30,720	...	30,720	...	No. 466 of 14th Oct. 1891.	
		Nernur	...	...	1,190	...	1,190	...	No. 497 of 26th Oct. 1891.	
	Udayagiri ...	Udayagiri East, Appasamudram.	...	...	1,500	...	1,500	...	No. 174 of 13th April 1891.	
		Total ...	107,820	168·47	60,304	...	168,124	262·69		
Cuddapah.	Kódúr ...	Kódúr Plantation ...	50	...	...	...	50	...	.....	
		Thanakonda ...	1,048	...	...	...	1,048	...	.....	
		Uparapalle	108	...	...	...	108	...	.....	
		Kódúr Hill	7,440	...	...	...	7,440	...	.....	
		Seshachellam ...	128,000	...	...	...	128,000	...	.....	
		Settikunta	8,960	...	...	...	8,960	...	.....	
		Avalapenta	...	...	1,434	...	1,434	...	No. 403 of 12th Sept. 1891.	
		Gotimanikona ...	...	...	3,732	...	3,732	...	No. 458 of 15th Oct. 1891.	
		Mushtiyeru	...	...	6,432	...	6,432	...	No. 547 of 9th Dec. 1891.	
	Rájampet.	Salivendra	12,800	...	...	...	12,800	...	.....	
		Pullampet	426	...	...	...	426	...	.....	
		Reddipalle	1,284	...	...	...	1,284	...	.....	
		Vattalúr	2,880	...	...	...	2,880	...	.....	
	Sidhout ...	Kanamalapalle ...	4,435	...	...	...	4,435	...	.....	
		Malliamkonda ...	10,240	...	...	...	10,240	...	.....	
	Cuddapah...	Kamalapuram ...	485	...	...	...	485	...	.....	
	Badvél	Kavalakuntla ...	9,920	...	...	...	9,920	...	.....	
		Ganugapenta ...	14,080	...	...	...	14,080	...	.....	
	Ráyachóti.	Gadikota	12,462	...	...	...	12,462	...	.....	
		Sibbyála	3,500	...	...	...	3,500	...	.....	
		Tsundapalle ...	3,000	...	...	...	3,000	...	.....	
		Vandadi	3,390	...	...	...	3,390	...	.....	
	Váyalpád ...	Yellutla	2,840	...	...	...	2,840	...	.....	
	Madanapalle.	Kotammakonda ...	640	...	...	...	640	...	.....	
		Madhanikonda ...	...	...	1,750	...	1,750	...	No. 386 of 1st Sept. 1891.	
		Nallakonda ...	...	...	3,856	...	3,856	...	No. 405 of 12th Sept. 1891.	
		Kukkarajupalle ...	...	...	1,660	...	1,660	...	No. 456 of 15th Oct. 1891.	
		Pulikonda	...	...	2,460	...	2,460	...	No. 472 of 14th Oct 1891.	
		Mothugamala ...	...	...	2,674	...	2,674	...	No. 519 of 16th Nov. 1891.	
	Kadiri ...	Vellichellamala ...	...	...	3,560	...	3,560	...	No. 220 of 2nd May 1891.	
		Mudupulajuvvi ...	...	...	1,226	...	1,226	...	No. 474 of 14th Oct. 1891.	
		Kakkarazukonda ...	...	...	2,720	...	2,720	...	No. 541 of 4th Dec. 1891.	
	Váyalpád.	Doddipalle	...	...	1,981	...	1,981	...	No. 185 of 16th April 1891.	
		Peddamallela ...	...	...	3,698	...	3,698	...	No. 464 of 14th Oct. 1891.	
		Total ...	227,988	356·23	37,183	...	265,171	414·33		
Chingleput.	Tiruvallúr.	Kambakkam ...	14,951	...	...	...	14,951	...	.....	
		Sathiavedu	6,859	...	...	...	6,859	...	.....	
		Ambakkam ...	5,259	...	...	...	5,259	...	.....	
		Aradur	2,680	...	...	...	2,680	...	.....	
		Kadur	2,494	...	...	...	2,494	...	.....	

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Chingleput—*cont.*	Tiruvallúr—*cont.*	Ugumudi	2,874	...	...	...	2,874	...	.....	
		Allikuli	5,649	...	...	...	5,649	...	.....	
		Nagalapuram ...	8,345	...	...	...	8,345	...	... ..	
		Palavakkam ...	...	...	2,511	...	2,511	...	No. 527 of 24th Nov. 1891.	
		Pulrambakkam ...	577	...	...	...	577	...	.....	
		Mylapore ...	930	...	...	...	930	...	.....	
		Vembedu ...	1,075	...	...	...	1,075	...	.. ...	
		Alamadi	1,263	...	...	...	1,263	...	.....	
		Vengathur	...	...	312	...	312	...	No. 404 of 12th Sept. 1891.	
		Tirukkalukunram ...	697	...	...	...	697	...	.....	
		Oragadam ...	540	...	...	...	540	...	.....	
		Madayathur ...	697	...	...	...	697	...	.....	
		Vallam	1,328	...	...	...	1,328	...	.....	
		Nemali	633	...	...	...	633	...	.....	
		Anjur	...	...	1,514	...	1,514	...	No. 102 of 10th Mar. 1891.	
		Alapakkam, A and B.	486	...	...	...	486	...	.....	
		Tirumani	...	...	639	...	639	...	No. 108 of 11th Mar. 1891.	
		Vandalur	3,207	...	...	...	3,207	...	.....	
		Senkunram	...	...	1,232	...	1,232	...	No. 120 of 21st Mar. 1891.	
		Kolathur *alias* Appur	1,449	...	...	...	1,449	...	.....	
		Venkatapuram ...	119	...	...	...	119	...	.....	
		Tiruteri	272	...	...	...	272	...	.....	
		Paranur	378	...	...	...	378	...	.....	
		Kotankolattur ...	535	...	...	...	535	...	.....	
		Kavanur	569	...	...	...	569	...	.....	
		Siruvanjur	465	...	...	...	465	...	.....	
		Orathur	312	...	...	...	312	...	.....	
		Vattambakam ...	...	...	694	...	694	...	No. 213 of 27th April 1891.	
	Chingleput.	Vadakupattu ...	795	...	...	...	795	...	.....	
		Kuttrambakam, A...	126	...	...	...	126	...	.....	
		Do. B...	205	...	...	...	205	...	.....	
		Puduppur	375	...	...	...	375	...	.....	
		Mannur	570	...	...	...	570	...	.....	
		Nallur	937	...	...	...	937	...	.....	
		Maganiyam ...	946	...	...	...	946	...	.....	
		Kalvayi	138	...	...	...	138	...	.....	
		Kolattur	1,909	...	...	...	1,909	...	.....	
		Kayar	642	...	...	...	642	...	.....	
		Taiyur	1,084	...	...	...	1,084	...	.....	
		Sonallur	1,107	...	...	...	1,107	...	.....	
		Unamanjeri ...	750	...	...	...	750	...	.....	
		Kumili	...	...	690	...	690	...	No. 152 of 7th April 1891.	
		Kattur	...	...	2,960	...	2,960	...	No. 221 of 2nd May 1891.	
		Alathur	488	...	...	...	488	...	.....	
		Illalur	692	...	...	...	692	...	.....	
		Sirukunram, A ...	...	...	869	...	869	...	No. 163 of 13th April 1891.	
		Do. B ...	...	...	378	...	378	...	No. 132 of 3rd April 1891.	
		Hanumantaputteri...	286	...	...	...	286	...	.....	
		Tandrai	664	...	...	...	664	...	.....	
		Pulikaradu	176	...	...	...	176	...	.. ...	
		Tambaram	262	...	...	...	262	...	.. ...	
		Kadapperi	227	...	...	...	227	...	.....	
		Selaiyur	498	...	...	...	498	...	.. ...	
		Madurapakkam ...	351	...	...	...	351	...	.....	
		Nanmangalam ...	328	...	...	...	328	...	.....	
	Saidápet.	Erumaiyur	192	...	...	...	192	...	.....	
		Arasankalani ...	...	...	185	...	185	...	No. 133 of 3rd April 1891.	
		Perumbakam, A ...	636	...	...	...	636	...	.....	
		Do. B ...	117	...	...	...	117	...	.....	
		Maiyur	534	...	...	...	534	...	.....	
		Kovilpidagai ...	...	...	377	...	377	...	No. 385 of 1st Sept. 1891.	

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Chingleput—*cont.*	Saidápet—*cont.*	Sikkarayapuram ...	93	...	...	...	93	...	.....	
		Kuttambakam ...	300	...	...	...	300	...	.....	
		Mittamalai	267	...	...	...	267	...	.....	
		Tirumalavayal ...	386	...	...	...	386	...	.....	
		Nandambakam ...	259	...	..	...	259	...	.....	
		Tirusulam	...	...	260	...	260	...	No. 153 of 7th April 1891.	
		Total ...	80,983	126·54	12,621	...	93,604	146·26		
North Arcot.	Chittoor.	Paradarami ...	15,043	...	...	...	15,043	...	.....	
		Pachigunta	1,800	...	...	...	1,800	...	.....	
		Kinatipalli	1,417	...	...	...	1,417	...	.....	
		Cheelapalli	1,296	...	...	...	1,296	...	.....	
		Santhapet	...	...	2,096	...	2,096	...	No. 292 of 22nd June 1891.	
		Basavapalli, A and B.	...	...	1,937	...	1,937	...	Nos. 333 & 334 of 23rd July 1891.	
		Mahimandalam ...	...	...	2,516	...	2,516	...	No. 357 of 8th Aug. 1891.	
	Chittoor and Chandragiri.	Penamur	6,400	...	...	4,303	2,097	...	.....	Rectification of area.
	Chandragiri.	Napier Reserve ...	8,772	...	...	...	8,772	...	.....	
		Mamundur	1,776	...	...	...	1,776	...	.....	
		Chamala	9,600	...	...	...	9,600	...	.....	
		Panapauk	6,400	...	...	...	6,400	...	.....	
		Pudipatla Bail ...	2,560	...	...	...	2,560	...	.....	
		Gazulamandiem ...	250	...	...	...	250	...	.....	
		Mamandur Extension	8,000	...	...	...	8,000	...	.....	
		Tirupati Hill ...	16,000	...	...	...	16,000	...	.....	
	Palmanér.	Musalimadugu ...	9,600	...	...	...	9,600	...	.....	
		Basvireddipalle ...	10,240	...	...	...	10,240	...	.....	
		Peddur	9,600	...	...	...	9,600	...	.....	
		Palmanér Tope ...	2	...	...	...	2	...	.....	
		Nagamangalam ...	31	...	...	...	31	...	.....	
		Peduguvaripalle ...	20	...	...	...	20	...	.....	
		Venkatagirikota ...	4	...	...	...	4	...	.....	
		Byreddipalle ...	4	...	...	...	4	...	.....	
		Charagallu ...	...	...	18,911	..	18,911	...	No. 307 of 1st July 1891.	
	Palmanér and Gudiyátam.	Mortana	16,000	...	7,800	...	23,800	...	.....	Rectification of area.
		Naickaneri	6,400	...	...	...	6,400	...	.....	
	Gudiyátam.	Ambur Drug ...	5,760	...	..	...	5,760	...	.....	
		Tiruvallam Plantation	435	...	...	...	435	...	.....	
		Virinjipuram do.	260	...	...	...	260	...	.....	
		Cheynur Tope ...	130	...	...	...	130	...	.....	
		Amundi Plantation.	160	...	...	...	160	...	.....	
		Tandrayagunta Tope.	2	...	...	...	2	...	.....	
		Vikramasi	161	...	...	...	161	...	.....	
		Naickaneri Extension	...	...	1,280	...	1,280	...	No. 354 of 3rd Aug. 1891.	
	Vellore.	Ambur Fuel Coupe.	3,840	...	...	...	3,840	...	.....	
		Palamadi	6,400	...	...	...	6,400	...	.....	
		Ambur Tope ...	5	...	...	...	5	...	.....	
	Pólúr ...	Carnatic Ghur ...	7,069	...	...	...	7,069	...	.....	
		Ammerdi Plantation.	25	...	...	...	25	...	.....	
		Puthur	12,800	...	...	...	12,800	...	.....	
		Kappalur	...	...	1,114	...	1,114	...	No. 125 of 21st Mar. 1891.	
		Patrakad	19,200	...	...	...	19,200	...	.....	
		Virappanur	64,000	...	...	...	64,000	...	.....	
		Kelur	...	...	2,866	...	2,866	...	No. 288 of 22nd June 1891.	

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		CENTRAL CIRCLE—*cont.*								
North Arcot—*cont.*	Polur ...	Malayalam ...	...	...	11,462	...	11,462	...	No. 353 of 6th Aug. 1891.	
	Vellore and Polur	Thellai ...	15,121	...	...	...	15,121	...	.....	
	Arcot. ...	Punganur ...	3,743	...	...	...	3,743	...	.....	
		Kilminnel Plantation.	150	...	...	...	150	...	.....	
		Sennaleri	1,675	...	...	...	1,675	...	.....	
		Sattur	...	...	709	...	709	...	No. 273 of 17th June 1891.	
		Tandapantangal ...	...	...	1,092	...	1,092	...	No. 258 of 11th June 1891.	
		Enadavadi	...	...	1,565	...	1,565	...	No. 100 of 11th March 1891.	
	Wálajá-pet.	Vannivedu Plantation.	30	...	...	...	30	...	.....	
		Arkónam Sub-Magistrate's Office compound.	5	...	...	...	5	...	.....	
		Arkónam Tope ...	37	...	...	...	37	...	.....	
		Gudalúr	535	...	...	...	535	...	.....	
		Anantapuram or Uriyur.	540	...	...	...	540	...	.....	
		Ammanur	203	...	...	...	203	...	.....	
		Banavaram	1,051	...	...	...	1,051	...	.....	
	Wandi-wash.	Brammakateri ...	635	...	...	...	635	...	.....	
		Kodialam	...	...	125	...	125	...	No. 323 of 17th July 1891.	
		Badur	...	...	783	...	783	...	No. 195 of 16th April 1891.	
		Vengunam	...	...	1,288	...	1,288	...	No. 194 of 16th April 1891.	
		Nambedu	...	...	707	...	707	...	No. 393 of 27th April 1891.	
		Vishamangalam ...	...	...	1,148	...	1,148	...	No. 210 of 27th April 1891.	
		Total ...	275,187	429·98	57,399	4,303	328,283	512·94		
South Arcot.	No. I, Tiruvannámalai.	Annamalai	2,640	...	...	...	2,640	...	.....	
		Chinnasamudram ...	3,769	...	...	...	3,769	...	.....	
		Mudenai	6,464	...	...	...	6,464	...	.....	
		Perungolatur Swamimalai.	9,312	...	...	...	9,312	...	.....	
		Anandavadi ...	8,672	...	...	...	8,672	...	.....	
		Kavuttumalai ...	10,032	...	...	...	10,032	...	.....	
		Tippakadu	4,442	...	...	...	4,442	...	.....	
	No. II, Tindivanam.	Siruvadi	4,608	...	...	...	4,608	...	.....	
		Muttakadu	4,053	...	...	...	4,053	...	.....	
		Karai	1,697	...	...	...	1,697	...	.....	
		Agaram	600	...	...	...	600	...	.....	
		Merkanam	80	...	...	...	80	...	.....	
		Kurumbaram, 2nd Bit.	192	...	...	...	192	...	.....	
		Kumalampatti ...	1,201	...	...	...	1,201	...	.....	
		Sevur	1,200	...	...	...	1,200	...	.....	
		Panchalam	1,120	...	...	...	1,120	...	.....	
		Venmaniyattur ...	486	...	...	...	486	...	.....	
		Peradikuppam ...	729	...	...	...	729	...	.....	
		Akkur	1,350	...	...	...	1,350	...	.....	
		Saram	243	...	...	...	243	...	.....	
		Salavadi	64	...	...	...	64	...	.....	
		Jakkampettai ...	300	...	...	...	300	...	.....	
		Adikuppam	150	...	...	...	150	...	.....	
		Ashikadu	450	...	...	...	450	...	.....	
	No, III, Villupuram.	Gangavaram ...	13,276	...	...	...	13,276	...	.....	
		Nabob's Tope ...	67	...	...	...	67	...	.....	
		Vakkur	384	...	...	...	384	...	.....	
		Vikkravandi ...	256	...	...	...	256	...	.....	
		Satanur, 1st Bit ...	204	...	...	...	204	...	.....	
		Narasinganur ...	428	...	...	...	428	...	.....	
		Gundalapuliyur ...	940	...	...	...	940	...	.....	
		Karanai	128	...	...	...	128	...	.....	

Area of Reserved Forests, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		Central Circle—*cont.*								
South Arcot—*cont.*	No. III, Villupuram—*cont.*	Adanur	1,491	...	...	...	1,491	...	.....	
		Ariyalur	1,036	...	...	...	1,036	...	.....	
		Valudareddi ...	...	...	260	...	260	...	No. 93 of 6th March. 1891.	
		Melkondai	...	...	480	...	480	...	No. 250 of 29th May 1891.	
		Sattanur, 2nd Bit ...	...	...	320	...	320	...	No. 264 of 11th June 1891.	
		Turinjikadu ...	...	...	853	...	853	...	No. 461 of 17th Oct. 1891.	
	No. IV, Cuddalore.	Vellakarai	1,568	...	...	...	1,568	...	.....	
		Valudalampattu ...	908	...	...	...	908	...	.....	
		Sammattikuppam ...	364	...	...	...	364	...	.....	
		Marungur	224	...	...	...	224	...	.....	
		Vegakottai	480	...	...	...	480	...	.....	
		Vadakottu	3,084	...	...	...	3,084	...	.....	
		Valudayampattu ...	1,536	...	...	...	1,536	...	.....	
		Kanjiruppu, 1st Bit.	2,956	...	...	...	2,956	...	.....	
		Velankuppam ...	1,094	...	...	...	1,094	...	.....	
		Shonankuppam ...	140	...	...	...	140	...	.....	
		Fort St. David ...	...	...	44	...	44	...	No. 188 of 16th April 1891.	
		Talankoda	...	...	217	...	217	...	No. 207 of 27th April 1891.	
		Sillambanadampettai.	...	...	780	...	780	...	No. 261 of 11th June 1891.	
		Nochikadu	...	...	640	...	640	...	No. 270 of 17th June 1891.	
		Peramattur	...	...	1,036	...	1,036	...	No. 272 of 17th June 1891.	
		Kangiruppu, 2nd bit.	...	...	2,519	...	2,519	...	No. 476 of 14th Oct. 1891.	
	No. V, Tirukoilur.	Velur	...	...	1,670	...	1,670	...	No. 324 of 14th July 1891.	
		Kuttadi	...	...	1,700	...	1,700	...	No. 402 of 12th Sept. 1891.	
		Total ...	94,418	147·53	10,519	...	104,937	163·96		
Tanjore.	Southern Range.	Block No. 2., Maltottam, Eastern Block.	10	...	...	...	10	...	.....	
		Block No. 3, Maltottam, Western Block.	8	...	...	...	8	...	.....	
		Manakadu	120	...	...	...	120	...	.....	
		Talanayar	2,000	...	...	...	2,000	...	.....	
		Tillaivilagam ...	320	...	...	...	320	...	.....	
		Nadur, No. 2 ...	200	...	...	...	200	...	.....	
		Thatchankurichi ...	320	...	...	...	320	...	.....	
		Veralipatti, North Block.	145	...	...	...	145	...	.....	
		Veralipatti, South Block.	234	...	...	...	234	...	.....	
		Kallupatti	85	...	...	...	85	...	.....	
		Kollangarai	458	...	...	...	458	...	.....	
		Puttur, No. I ...	191	...	...	...	191	...	.....	
		Nadur, No. I ...	1,000	...	...	...	1,000	...	.....	
		Puttur, No. II ...	119	...	...	...	119	...	.....	
	Northern Range.	Northern Casuarina.	350	...	...	...	350	...	.....	
		Southern do.	250	...	...	...	250	...	.....	
		Neidavasal	42	...	...	...	42	...	.....	
		Elantope	...	...	17	...	17	...	No. 531 of 24th Nov. 1891.	
		Total ...	5,852	9·14	17	...	5,869	9·17		
Trichinopoly.	Trichinopoly.	Tuvakudi	1,438	...	...	...	1,438	...	.....	
	Kulitalai.	Elamanur	117	...	...	...	117	...	.....	
		Pettavoitalai ...	137	...	...	...	137	...	.....	
		Kulitalai	77	...	...	...	77	...	.....	
		Manatattai	45	...	...	...	45	...	.....	
		Lalapet	268	...	...	...	268	...	.....	

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Trichinopoly—*cont.*	Kulitalai—*cont.*	Sittalavoi	160	...	...	...	160	...	.....	
		Kattalai ...	75	...	...	...	75	...	.....	
		Tainimalai	464	...	..	...	464	..	.....	
		Minnakaradu ...	98	...	...	...	98	...	.....	
		Panjantanji ...	1,543	...	...	...	1,543	...	.....	
		Viramalai Hills ...	5,472	...	...	...	5,472	...	.....	
		Poiyapetti do. ...	639	...	...	...	639	...	.....	
		No. I, Shenmalai ...	2,477	...	...	...	2,477	...	.....	
		Pakkiri Karadu ...	65	...	...	...	65	...	.....	
		Puttanatam Range comprising Karumalai, Palamalai and Nedumalai.	705	...	...	...	705	...	.....	
		Surpam Range ...	1,403	...	...	...	1,403	...	.....	
		Mathalamalai ...	465	...	...	...	465	...	.....	
		Maradur	180	...	...	...	180	...	.....	
		Mayanur	50	...	...	...	50	...	.....	
		No. II, Shenmalai ...	1,593	...	...	...	1,593	...	.....	
		Sigam Karadu ...	714	...	...	...	714	...	.....	
		Panjantangi Hill Valley.	...	...	286	...	286	...	No. 352 of 6th Aug. 1891.	
	Musiri ..	Sengattupatti ...	3,000	...	...	...	3,000	...	.....	
		Melur	3,000	...	...	...	3,000	...	.....	
		Kaliammankoil Tittu.	1,500	...	...	...	1,500	...	.....	
		Karuppankadu do.	2,000	...	...	...	2,000	...	.....	
		Kanapadi Kannimar Solai.	2,560	...	..	...	2,560	...	.....	
		Kanapadi Thenparanad.	12,000	...	21	...	12,021	...	.....	By purchase.
	Perambalur.	Palamalai	10,000	...	...	...	10,000	...	.....	
		Manalodai	4,000	...	...	...	4,000	...	.....	
		Solamatte	7,000	...	...	...	7,000	...	.....	
		Selaiyur	1,600	...	...	...	1,600	...	.....	
		Puliyur	10,000	...	...	...	10,000	...	.....	
		Semmalai	5,000	...	...	...	5,000	...	.....	
		Sengattur	10,000	...	...	...	10,000	...	.....	
	Udayarpalaiyam.	Adanakurichi ...	250	...	...	...	250	...	.....	
		Malangan Kudiyiruppu	150	...	...	...	150	...	.....	
		Tennamanallur ...	10	...	...	...	10	...	.....	
		Velakkurichi ...	48	...	...	...	48	...	.....	
		Sittidaiyar	...	...	53	...	53	...	No. 101 of 12th Mar. 1891.	
		Pasikkulam ...	...	...	100	...	100	...	No. 103 of 10th Mar. 1891.	
		Periakkurichchi ...	...	...	147	...	147	...	No. 105 of 12th Mar. 1891.	
		Sattambadi	...	...	1,000	...	1,000	...	No. 106 of 12th Mar. 1891.	
		Kolamanikkam ...	...	...	236	...	236	...	No. 89 of 6th Mar. 1891.	
		Vettiyarpattu, Nos. I and II.	...	...	620	...	620	...	Nos. 90 and 91 of 6th Mar. 1891.	
		Aramanaikkurichchi.	...	...	91	...	91	...	No. 92 of 6th Mar. 1891.	
		Sundaresvarapuram.	...	...	150	...	150	...	No. 118 of 18th Mar. 1891.	
		Ambappur	...	...	200	...	200	...	No. 121 of 21st Mar. 1891.	
		Ulliyakkudi ...	...	...	196	...	196	...	No. 122 of 21st Mar. 1891.	
		Alavayi	...	...	300	...	300	...	No. 123 of 21st Mar. 1891.	
		Annangarpettai ...	...	...	57	...	57	...	No. 170 of 13th April 1891.	
		Mudukkalam ...	...	...	1,197	...	1,197	...	No. 287 of 22nd June 1891.	
		Periavalayam ...	...	...	985	...	985	...	No. 290 of 22nd June 1891.	
		Vilangudi	...	...	900	...	900	...	No. 291 of 22nd June 1891.	
		Ayyur	...	...	1,400	...	1,400	...	No. 452 of 14th Oct. 1891.	
		Varappanakurichchi.	...	...	190	...	190	...	No. 459 of 15th Oct. 1891.	

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	CENTRAL CIRCLE—*cont.*									
Trichinopoly—*cont.*	Udayárpálaiyam—*cont.*	Sripurandan, Bit No. I.	...	...	457	..	457	...	No. 467 of 14th Oct. 1891.	
		Kovilur	...	...	700	...	700	...	No. 469 of 14th Oct. 1891.	
		Jayankondasholapuram, No. I.	...	...	150	..	150	....	No. 369 of 12th Aug. 1891.	
		Jayankondasholapuram, No. 2.	...	...	290	...	290	...	No. 371 of 12th Aug. 1891.	
		Kanguli	...	..	800	...	800	...	No. 471 of 14th Oct. 1891.	
		Vena Nallur ...	...	..	197	...	197	...	No. 370 of 12th Aug. 1891.	
		Tirukkonam ...	...	...	650	...	650	...	No. 473 of 14th Oct. 1891.	
		Koddukkur ...	...	...	92	...	92	...	No. 368 of 12th Aug. 1891.	
		Kulumur	...	...	200	...	200	...	No. 475 of 14th Oct. 1891.	
		Total ...	90,303	141·10	11,665	...	101,968	159·33		
Salem.	Salem.	Bodamalai	5,600	...	..	..	5,600	...	.....	
		Pillapadi	...	...	4,992	...	4,992	...	No. 373 of 14th Aug. 1891.	
		Attur Ghát	3,142	...	...	...	3,142	...	.....	
		Mallapuram G h ...	2,285	...	...	...	2,285	...	.....	
		Nartanchedu ...	2,400	...	...	...	2,400	..	.....	
		Vaniyar	4,512	..	...	...	4,512	...	.....	
		Kutar	3,795	...	...	...	3,795	...	.....	
		Manjavadi Ghát ...	8,461	...	...	...	8,461	...	.....	
		Mallapuram Ghát Extension.	640	...	...	...	640	...	.....	
		Ajjampati	1,920	...		...	1,920	...	.....	
		Nartanchedu Extension.	1,088	...	...	...	1,088	...	.....	
		Yerimalai	3,520	...	...	...	3,520	...	.....	
		Kanavoipudur ...	3,200	..	...	...	3,200	...	.....	
		Lokur	5,312	...	...	..	5,312	...	.....	
		Pillapalli Kombai, New.	2,080	...	...	...	2,080	...	.....	
		Atur Ghát Extension.	544	...	...	...	544	...	.....	
		Kanjeri, New ...	4,032	...	...	...	4,032	...	.....	
		Pannikaradu ...	4,832	...	..	...	4,832	...	.....	
		Mallapuram ...	589	...	...	...	589	...	....	
		Karuvattuparai ...	1,800	...	...	...	1,800	...	.....	
		Gundakal	4,000	...	...	...	4,000	...	.....	
		Vanavasi ...	...	...	9,000	...	9,000	...	No. 186 of 16th April 1891.	
		Manakonda	5,500	...	...	...	5,500	...	.....	
		Puliyankidai ...	1,000	...	...	...	1,000	...	.....	
		Mattikottai	3,500	...	...	...	3,500	...	.....	
		Punjamadevi ...	2,500	...	...	...	2,500	...	.....	
		Godumalai	7,000	...	...	...	7,000	...	.....	
		Jalluttur	12,000	...	...	...	12,000	...	.....	
		Kanjamalai	4,500	...	...	...	4,500	...	.....	
		Mary Land	400	...	...	...	400	...	.....	
	Atúr.	Varagur	2,675	...	...	...	2,675	...	.....	
		Nayakenkombai ...	2,880	...	...	...	2,880	...	.....	
		Bylur	6,880	...	...	...	6,880	...	.....	
		Nagur	3,757	...	...	...	3,757	...	.....	
	Atúr and Námakal.	Karavallikombai ...	8,755	...	...	...	8,755	...	.....	
	Námakal.	Jambuttu	2,617	...	...	...	2,617	...	.....	
		Puliyanshola ...	5,530	...		...	5,530	...	.....	
	Uttankarai.	Pallipatti	8,000	...	...	...	8,000	...	.....	
		Thambakal	7,757	...	...	...	7,757	...	.....	
		Chitteri	3,917	...	...	...	3,917	...	.....	
		Chittilingi	6,880	...	...	...	6,880	...	.....	
		Kottapatti	8,960	...	...	...	8,960	...	.....	
		Puvampatti	4,672	...	...	...	4,672	...	.....	
		Ammapalaiyam ...	...	...	9,216	...	9,216	...	No. 325 of 14th July 1891.	
		Singarapet	2,624	...	...	...	2,624	...	.....	
		Mallapuram Extension.	400	...	...	...	400	...	.....	

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		CENTRAL CIRCLE—*cont.*								
Salem—*cont.*	Tirupatúr.	Mangalam	6,080	...	...	...	6,080	...	...	
		Nagaluttur	2,560	...	...	...	2,560	...	.....	
		Mambakam ...	9,370	...	...	...	9,370	...	.....	
		Pungolam	7,834	...	...	...	7,834	...	.....	
		Mudukaddappu ...	2,048	...	...	...	2,048	...	.....	
		Jolárpet	1,216	..	...	...	1,216	...	.....	
		Narasingapuram ...	2,048	...	...	...	2,048	...	.....	
		Kolarpatti ...	2,016	...	...	...	2,016	...	.....	
		Alangayam ...	11,520	...	...	...	11,520	...	.....	
	Tirupatúr and Uttankarai.	Singarapet Extension.	7,398	...	...	...	7,398	...	.....	
	Tirupatúr & Krishnagiri.	Kotur	3,840	...	...	...	3,840	...	.....	
	Hosúr ...	Ayyur	5,952	...	...	...	5,952	...	.....	
		Marandahalle ..	5,824	...	...	...	5,824	...	.....	
		Gulhutti, New ...	7,942	...	...	...	7,942	...	.....	
		Manchi, New ..	5,632	...	...	...	5,632	...	.....	
		Jowlagiri	6,016	...	...	...	6,016	...	.....	
		Talle	6,368	...	...	...	6,368	..	...	
		Naganur	3,200	...	...	...	3,200	..	.....	
		Denkanikóta ...	2,816	...	...	...	2,816	...	.....	
		Toluvabetta ...	6,919	...	...	...	6,919	...	.....	
		Anchetti	8,832	...	...	...	8,832	...	.....	
		Natrapalaiyam ...	10,880	...	...	...	10,880	...	.....	
		Biligundla	14,272	...	...	...	14,272	...	.....	
		Kestur	11,616	...	...	...	11,616	...	.....	
		Billikal	11,136	...	...	...	11,136	...	.....	
		Mallahalli	8,928	...	...	...	8,928	...	.....	
		Taggatti	10,432	...	...	...	10,432	..	.....	
	Dharmapuri.	Pennagaram ...	10,304	...	...	...	10,304	...	.....	
		Morappur	16,640	...	...	...	16,640	...	.....	
		Bianurmalai ...	11,500	...	...	...	11,500	...	.....	
		Masakal	...	...	9,600	...	9,600	...	No. 468 of 14th Oct. 1891.	
		Perumbalaimalai ...	...	...	12,000	...	12,000	...	No. 171 of 13th April 1891.	
	Hosúr and Dharmapuri.	Wooddapatti ...	17,152	...	...	...	17,152	...	.....	
		Gutirayen	15,776	...	...	...	15,776	...	.....	
	Krishnagiri.	Burgur, New ...	1,920	...	...	...	1,920	...	.....	
		Togarapalli	900	...	...	...	900	...	.....	
	Tiruchengód.	Pakkanad	4,500	...	...	..	4,500	...	.....	
		Suriyamalai ...	...	...	4,650	...	4,650	...	No. 223 of 2nd May 1891.	
		Total ...	437,843	684·13	49,458	...	487,301	761·41		
		Total of the Circle ...	1,320,394	2063·12	239,166	4,303	1,555,257	2430·09		
		SOUTHERN CIRCLE.								
Madura.	I or Cumbum Valley.	*Cumbum Valley, East.*								
		Block No. 1, Kuttinachiar.	640	...	...	...	640	...	.....	
		Block No. 2, Surulipatti.	5,760	...	...	...	5,760	..	.....	
		Block No. 3, Pandaratorai.	300	...	...	...	300	...	...	
		Block No. 4, Vannatiparai.	27,520	...	...	...	27,520	...	.....	
		Block No. 5, Melagudalur.	1,280	...	...	...	1,280	...	...	
		Cumbum Valley, West.								
		Block No. 1, Suranganar.	3,616	...	...	...	3,616	...	...	
		Block No. 2, Matchakal.	2,560	...	...	...	2,560	...	.....	
		Tambirankanal ...	256	...	...	...	256	...	...	
		Vikkaramangalam ...	3,789	...	...	...	3,789	...	.....	

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Southern Circle—*cont.*										
		Palni Hills, Southern Slopes, West.								
		Block No. 1, Amburivi.	3,840	...	(*a*)2,560	...	6,400	...	.....	(*a*) Rectification of area by survey.
		Block No. 2, Sengalvaraiar.	5,210	...	...	(*a*) 601	4,609	...	.....	
		Block No. 3, Karungaldhonimedu.	1,920	...	...	...	1,920	...	.....	
		Block No. 4, Pambar.	4,243	...	...	...	4,243	...	.....	
		Block No. 5 Adukkam.	3,200	...	...	...	3,200	...	.....	
		Murugamalai ...	...	...	6,572	...	6,572	...	No. 389 of 1st Sept. 1891.	
		Palni Hills, Southern Slopes, East.								
		Block No. 1, Marudanadiar.	6,528	...	...	...	6,528	...	.....	
		Block No. 2, Kadugatadi.	1,280	...	...	...	1,280	...	.....	
		Block No. 3, Arunkanal.	1,920	...	...	...	1,920	...	.....	
		Block No. 4, Arunkanalshola.	32	...	...	...	32	...	.....	
		Block No. 5, Southern Slopes.	...	...	25,600	...	25,600	...	No. 147 of 7th April 1891.	
		Block No. 6, Unjalanchi.	256	...	...	...	256	...	.....	
		Varatharkanal ..	160	..	...	...	160	...	.....	
		Iruttarkanal ...	100	...	...	...	100	...	.....	
		Pambukkalar ...	800	...	...	...	800	...	.....	
		Kokkuparai ...	320	...	...	...	320	...	.....	
		Palni Hills, Northern Slopes, East.								
Madura—*cont.*	II or Palni Hill.	Block No. 1, Siruvattukadu.	2,279	...	...	...	2,279	...	.....	
		Block No. 2, Northern Slopes.	12,800	...	...	...	12,800	...	.....	
		Block No. 3, Vennilai.	4,800	...	...	...	4,800	...	.....	
		Block No. 4, Kanienkadu.	3,002	...	...	...	3,002	...	.....	
		Block No. 5, Norchiarkad.	200	...	...	...	200	...	.....	
		Block No. 6, Talaiaraandarkovilkad.	30	...	...	...	30	...	.....	
		Palni Hills, Northern Slopes, West.								
		Block No. 1, Pumbarai Vilpatti Valley.	13,587	...	...	...	13,587	...	.....	
		Block No. 2, Velankombai.	1,600	...	...	...	1,600	...	.....	
		Block No. 3, Velankombai Plantation.	54	...	...	...	54	...	.....	
		Block No. 4, Olianathuodai.	3,200	...	...	...	3,200	...	.....	
		Block No. 5, Kukkal.	9,645	...	...	...	9,645	...	.....	
		Block No. 6, Kudriyar.	10,061	...	...	...	10,061	...	.....	
		Perumalmalai.								
		Block No. 1, Perumalmalai.	12,800							
		Block No. 2, Thogavarai Shola.	32	...	...	5,646	7,386	...	.....	Rectification of area by survey.
		Block No. 3, Talaiarkadu.	150							
		Block No. 4, Kadamaravu.	50							

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Southern Circle—*cont.*									
Madura—*cont.*	II or Palni Hill—*cont.*	*Kallar.*								
		Block No. 1, Kallar.	9,600	...	...	...	9,600	...	.....	
		Block No. 2, Ariyanuttukanal.	64	...	...	...	64	...	.....	
		Block No. 3, Kumangovaimalaikad.	80	...	...	...	80	...	.....	
		Lower Palni Sholas.								
		Block No. 1, Kadavu	64	...	...	...	64	...	.....	
		Block No. 2, Petrankanal.	80	...	...	...	80	...	.....	
		Upper Palni Sholas.								
		Block No. 1, Perumalmalai.								
		Block No. 2, Serathankanal.								
		Block No. 3, Tiger Shola.								
		Block No. 4, Kodaikanal.								
		Block No. 5, Gundan and Manavan.								
		Block No. 6, Parappar.	2,316	...	...	...	2,316	...	.....	
		Block No. 7, Pannitulam.								
		Block No. 8, Gunden.								
		,, ,, 9, Sandanam.								
		Block No. 10, Fort Hamilton.								
		Block No. 11, Mariyan.								
		Upper Palni Plantation.								
		Block No. 1, Gundan Shola (*a*).								
		Block No. 2, Gundan Shola (*b*).								
		Block No. 3, Post Office.	247	...	41	...	288	...	.....	Rectification of area by survey.
		Block No. 4, Poombarai.								
		Perumalai	9,600	...	...	...	9,600	...	.....	
		Budagudimalai ...	1,120	...	...	...	1,120	...	.....	
		Poolamalai	800	...	...	...	800	...	.....	
		Kanavoipatti.								
		Block No. 1, Karandamalai.	...	...	22,077	...	22,077	...	No. 453 of 15th Oct. 1891.	
		Block No. 2, Kuppuravalli kutta.	1,920	...	...	1,075	845	...	.....	Rectification of area by survey.
	III or Kanavoipatti.	Block No. 3, Akkamakaradu.	1,600	...	...	1,299	301	...	.....	Do. do.
		Block No. 4, Tenkal.	1,920	...	...	1,331	589	...	.....	Do. do.
		Mudimalai	4,435	...	...	...	4,435	...	.....	
		Aiyalur.								
		Block No. 1, Pilliyarnattam.	5,485	...	...	...	5,485	...	.....	
		Block No. 2, Panjantangi.	...	...	7,423	...	7,423	...	No. 463 of 14th Oct. 1891.	
		Block No. 3, Tannirkaradu.	1,920	...	...	954	966	...	.....	Rectification of area by survey.
		Block No. 4, Sundamalai.	1,920	...	...	1,510	410	...	.....	Do. do.

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Southern Circle—*cont.*									
Madura —*cont.*	IV or Palamedu Range.	Sengattampatti ...	1,600	...	...	...	1,600	...	.....	
		Kaduvakurichi ...	3,200	...	...	...	3,200	...	.....	
		Sirumalai.							.....	
		Block No. 1, Sirumalai	25,600	...	...	* 3,814	21,786	...		
		Block No. 2, Kachchakatti.	...	...	1,745	...	1,745	...	No. 136 of 13th April 1891.	
		Alagar Hill.								
		Block No. 1, Alagar Hill.	16,838	...	...	...	16,838	...	.....	
		Sembulimalai ...	1,600	...	....	...	1,600	...	.....	
		Mottamalai	800	...	...	...	800	...	.....	
		Waguttumalai ...	...	...	6,089	...	6,089	...	No. 135 of 3rd April 1891.	
		Total ...	242,629	379·11	72,107	16,230	298,506	466·41		
Tinnevelly.	Nanguneri	Reserve No. I ...	31,533	...	...	...	31,533	...	.....	
		Teak Tract	284	...	...	...	284	...	.....	
		Block No. I (a) ...	25,999	...	...	...	25,999	...	.....	
	Ambasamudram.	Reserve No. II ...	91,008	...	...	...	91,008	...	.....	
		Mullimalai	457	...	...	...	457	...	.....	
		Kaliyammankoilpar a	309	...	...	...	309	...	...	
		Koviladparai ...	124	...	...	...	124	...	.....	
		Saluparpathai ...	71	...	...	...	71	...	.....	
		Block No. II (a) (b)	53,819	...	...	...	53,819	...	.....	
		Kolundamamalai ...	1,540	...	...	...	1,540	...	.....	
	Tenkasi ...	Reserve No. III ...	18,010	...	...	...	18,010	...	.....	
		Okaninranpathai ...	85	...	...	...	85	...	.....	
		Kavulkattiparambu.	374	...	...	...	374	...	.....	
		Kottamalai	860	...	...	...	860	...	.....	
		Nalankurichi ...	212	...	...	...	212	...	.....	
		Chinnakadu as defined in Mr. Baber's decision on claims of Inamdar.	2,560	...	...	...	2,560	...	.....	
		Block III, a, b, c, d.	...	...	10,643	...	10,643	...	No. 178 of 13th April 1891.	
	Sankaranainarkoil	Reserve No. IV ...	19,738	...	...	...	19,738	...	.....	
		Chunnambuparambu	286	...	...	...	286	...	.....	
		Block No. IV, (a) ...	...	...	30,714	...	30,714	...	No. 176 of 13th April 1891.	
		Sayamalai	...	...	294	...	294	...	No. 355 of 1st August 1891.	
	Srivilliputtur.	Reserve No. V. ..	23,270	...	...	...	23,270	...		
		Unnipattimalai ...	530	...	...	...	530	...		
		Sappaniparambu ...	376	...	...	...	376	...		
		Pulpattuparambu ...	51	...	...	...	51	...		
		Martandamparai ...	135	...	...	...	135	...		
		Kottankulam ...	473	...	...	...	473	...		
		Block V (a)	...	...	39,874	...	39,874	...	No. 175 of 13th April 1891.	
		Valaikulamparambu.	...	...	1,120	...	1,120	...	No. 335 of 23rd July 1891.	
	Tinnevelly	Talaiyutu	...	...	890	...	890	...	No. 150 of 7th April 1891.	
		Sivalaperi	...	...	213	...	213	...	No. 149 of 7th April 1891.	
	Tenkarai.	Pannamparai ...	117	...	...	...	117	...		
		Kaliyavur	158	...	...	...	158	...		
		Kottamadakikadu ...	1,279	...	...	...	1,279	...		
		Kongarayakurichi ...	60	...	...	...	60	...		
		Vallarad Hills ...	...	...	4,666	...	4,666	...	No. 465 of 14th October 1891.	
	Otapidaram.	Virusampatti ...	294	...	...	...	294	...	.....	
		Milavittan	...	...	709	...	709	...	No. 271 of 17th June 1891.	
		Total ...	274,012	428·14	89,123	...	363,135	567·40		

* Due to rectification of area.

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Southern Circle—*cont.*										
North Coimbatore.	Satyamangalam.	Gairmallam ...	520	...	...	..	520	...	.....	
		Vellamundi ...	12,800	...	...	...	12,800	...	.....	
		Eastern slopes of Nilgiris.	60,800	...	...	...	60,800	...	.....	
		Talamalai	...	...	121,600	...	121,600	...	No. 435 of 5th October 1891.	These blocks were originally notified under Section 25 of the Forest Act, but are now included in the Doddasampagai Reserved Forest notified under section 16.
	Kollegal.	Jadatalahulla ...	361							
		Udayarpalaiyam ...	297							
				...	...	1,844	...	...	.....	
		Bylur	1,186							
		Chikkailuru ...	...	...	53,760	...	53,760	...	No. 257 of 11th June 1891.	
		Doddasampagai ...	...	...	60,800	...	60,800	...	No. 13 of 19th Dec. 1891.	
		Total ...	75,964	118·69	236,160	1,844	310,280	484·81		
South Coimbatore.	No. I, Tunacadavu and No. 2, Pollachi.	Anamalais No. I ...	52,480	...	...	...	52,480	...	.....	
	No. 2, Pollachi.	Do. No. 2 ...	3,140	...	...	...	3,140	...	.....	
	No. IV, Udamalpet.	Do. No. 3 ...	47,360	...	...	...	47,360	...	.....	
	No. II, Pollachi and Udamalpet.	Do.	133,120	...	...	...	133,120	...	.....	
	No. VII, Bolampatti, and VIII, Sholakarai.	Bolampatti Block No. I.								
	No. VIII, Bolampatti.	Bolampatti Block No. II.	47,680	...	...	...	47,680	...	.....	
		Bolampatti Block No. III.								
		Tadagam No. IV ...	30,720	...	...	...	30,720	...	.....	
	No. VI, Mettupalaiyam	Gopanari V								
		Kempampalaiyam VI	38,200	...	...	...	38,200	...	.....	
		Nellitorai VII ...								
		Odanthorai VIII ...	5,880	...	...	...	5,880	...	.....	
		Modur IX	3,600	...	...	...	3,600	...	.....	
	No. VIII, Sholakarai.	Small Sholakarai Reserve.	81	...	...	...	81	...	.....	
		Total ...	362,261	566·03	...	...	362,261	566·03	.....	
Nilgiris.	Mudumalai.	Benne	11,068	...	...	...	11,068	...	.....	
		Gadsbrook	230	...	...	...	230	...	.....	
		Cherambadi ...	1,983	...	...	...	1,983	...	.....	
		Ammankaval ...	563	...	...	...	563	...	.....	
		Kalhatti Slopes ...	8,983	...	...	...	8,983	...	.....	
		Ebanad	571	...	...	...	571	...	.....	
	Sigur ...	Moyar	13,580	...	...	...	13,580	...	.....	
		Northern Hay ...	3,998	...	...	...	3,998	...	.....	
		Naduvattam ...	3,411	...	...	...	3,411	...	.....	

Area of Reserved Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Southern Circle—*cont.*									
Nilgiris —*cont.*	Ootacamund.	Marliamund Plantation.	17	...	...	...	17	...	.....	
		Aramby	430	...	...	...	430	...	.....	
		Marliamund ...	194	...	...	...	194	...	.....	
		Cairn Hill	559	...	...	...	559	...	.....	
		Brooklands	177	...	...	...	177	...	.....	
		Loyedale	296	...	...	...	296	...	.....	
		Craigmore	299	...	...	...	299	...	.....	
		Dodabetta ...	991	...	...	...	991	...	.....	
		Snowdon	1,053	...	...	...	1,053	...	.....	
		Jakuntha	373	...	...	...	373	...	.....	
		Muthanad	420	...	...	...	420	...	.....	
		Governor's Shola ...	2,671	...	...	...	2,671	...	.....	
		Pykara	1,309	...	...	...	1,309	...	.....	
		Sandynullah ...	818	...	...	...	818	...	.....	
		Kengodu	451	...	...	...	451	...	.....	
		Karpakan	391	...	...	...	391	...	.....	
		Nadiwattam Sholas	1,501	...	...	...	1,501	...	.....	
		Vellingiri	643	...	...	...	643	...	.....	
		Kadcoopa	1,622	...	...	...	1,622	...	.....	
		Mukurti	8,953	...	...	...	8,953	...	.....	
		Kundahs	40,521	...	...	...	40,521	...	.....	
		Mikkeru	1,267	...	...	...	1,267	...	.....	
		Thia Shola	1,551	...	...	...	1,551	...	.....	
		Hiriya Shigi ...	2,175	...	...	...	2,175	...	.....	
		Devamalai	229	...	...	...	229	...	.....	
		Honnathalai ...	320	...	...	...	320	...	.....	
		Fern Hill Shola ...	...	...	10	...	10	...	No. 253 of 29th May 1891.	
		Addition to Fair Lawn's Block I.	...	...	22	...	22	...		
		Addition to Dodabetta No. II.	...	...	13	...	13	...		
		Addition to Dodahalla	...	...	10	...	10	...		
		Bilikal Road ...	...	...	25	...	25	...		
		Hulikal ...	6,411	...	...	...	6,411	...	.....	
		Rallia ...	189	...	...	...	189	...	.....	
		Black Bridge ...	390	...	...	...	390	...	.....	
		Coonoor Peak ...	540	...	...	...	540	...	.....	
		Lamb's Rock ...	708	...	...	...	708	...	.....	
		Tiger Hill ...	328	...	...	...	328	...	.....	
		Ghát Reserve ...	311	...	...	...	311	...	.....	
		Hill Grove	187	...	...	...	187	...	.....	
		Kullar	1,815	...	...	...	1,815	...	.....	
		Kótagiri	563	...	...	...	563	...	.....	
		Ithalar	460	...	...	...	460	...	.....	
		Deva Shola	215	...	...	...	215	...	.....	
		Balakola	935	...	...	...	935	...	.....	
		Athigaratti ...	34	...	...	...	34	...	.....	
		Sutton Shola ...	52	...	...	...	52	...	.....	
		Commandu	993	...	...	...	993	...	.....	
		Pembroke	122	...	...	...	122	...	.....	
		Nedukaduhalla ...	885	...	...	...	885	...	.....	
	Coonoor.	Bettumund, South.	...	...	137	...	137	...	No. 193 of 16th April 1891.	
		Little Ralliah ...	...	...	29	...	29	...		
		Rallah Shola ...	...	...	30	...	30	...		
		Halhkaray ...	...	...	172	...	172	...		
		Billithit u ...	...	...	35	...	35	...		
		Dolphin ...	...	...	65	...	65	...		
		Gnernsey ...	...	...	14	...	14	...		
		Kodamalai ...	...	...	15	...	15	...		
		St. Catherine's Fall.	...	...	124	...	124	...		
		Constantia ...	...	...	35	...	35	...		
		Tuttapoliam ...	...	...	54	...	54	...		
		Gudakalhalla ...	...	...	299	...	299	...	No. 206 of 27th April 1891.	
		Bettu Nos. 1 and 2.	...	...	29	...	29	...		
		Kunnavara addition.	...	...	98	...	98	...		
		Kanavath ...	...	...	16	...	16	...		
		Deepdale ...	...	...	361	...	361	...		

Area of Reserved Forest, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Southern Circle—*cont.*									
Nilgiris —*cont.*	Coonoor —*cont.*	Gudakal	...	...	600	...	600	...		
		Clyffe ...	...	...	33	...	33	...		
		Dodabetta, I and II.	...	...	105	...	105	...		
		Shamrock	...	...	43	...	43	...		
		Bikkehatti	...	...	19	...	19	...		
		Ittakal, Nos. 1 and 2.	...	...	21	...	21	...		
		Mavada	...	...	211	...	211	...		
		Kuttada Nos. 1 and 2.	...	...	29	...	29	...		
		Sundatti	...	...	124	...	124	...	No. 512 of 14th Oct. 1891.	
		Kufishola	...	...	159	...	159	...		
		Kirkanara, Nos. 1 and 2.	...	...	24	...	24	...		
		Kilatti	...	...	17	...	17	...		
		Hadumund	...	...	48	...	48	...		
		Uppatti	...	...	53	...	53	...		
		Doddakava	...	...	62	...	62	...		
		Ullavanadmund Shola.	...	...	57	...	57	...		
		Sinnattu Shola ...	...	...	51	...	51	...		
		Longwood Reserve additon.	...	...	31	...	31	...	No. 193 of 16t April 1891.	
		Kullar addition to I and II.	...	...	72	...	72	...	No. 193 of 16th April 1891 and No. 206 of 27th April 1891.	
		Benhope No. 2 ..	...	...	34	...	34	...		
		Kallur	...	...	388	...	388	...		
		Total ...	128,756	201·18	3,774	...	132,530	207·08	.....	
North Malabar.	Chedleth Reserved Forest.	Kuppadi	7,337	...	...	...	7,337	...	.....	
		Kurchiyat	18,054	..	...	...	18,054	...	.....	
		Rampur	18,855	...	...	...	18,855	...	... ..	
	Trans-Beni	Nulpoya	3,613	...	...	...	3,613	...	.....	
		Mavinhulla	12,577	...	...	...	12,577	...	.....	
	Kudrakote and Padri.	Begur	15,366	...	...	...	15,366	...	.....	
		Adavankunnu ...	39	...	...	...	39	...	.....	
		Total ...	75,841	118·51	...	...	75,841	118·51	.. ...	
South Malabar.	Nilambur.	Amarampalem ...	468	...	...	...	468	...	.....	
		Chathambarai ...	700	...	...	...	700	...	.....	
	Amarampalam.	Karimpoya Reserve.	3,955	..	...	...	3,955	...	.....	
		Nellikutta do. ...	1,824	...	...	...	1,824	...	.....	
	Palghaut.	Walayar do. ...	3,017	...	...	...	3,017	...	.....	
		Chenat Nair do. ...	15,203	...	...	...	15,203	...	.....	
		Total ...	25,167	39·32	...	...	25,167	39·32	.....	
South Canara.	Coondapoor.	No. I, Sabladi ...	208	...	...	...	208	...	.....	
	Udipi.	„ II, Ajjarkadu.	160	...	...	...	160	...	.....	
		„ III, Pilarkhan.	320	...	...	...	320	...	.....	
		„ VIII, Chinkramalle.	2,560	...	...	...	2,560	...	.....	
		„ VI, Manajekadu.	423	...	...	...	423	...	.....	
		„ XIV, Durgamalai	1,601	...	...	...	1,601	...	.....	
		„ XV, Andar Reserve.	22,334	...	...	...	22,334	...	.....	
		„ VII, Tenkahola.	...	...	2.039	...	2,039	...	No. 179 of 13th April 1891.	

Area of Reserved Forest 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Southern Circle—*cont.*									
South Canara —*cont.*	Mangalore.	No. VI, Chembugudde.	75	...	...	...	75	...	.....	
		„ VII, Kutiyar ...	25	...	...	...	25	...	.....	
		„ V, and IV, Poitaji and Kayarpalle.	96	...	...	...	96	...	.....	
		„ V, Ullal Casuarina and Honne.	57	...	...	...	57	...	.....	
		„ X, Tannirbhavi.	70	...	...	...	70	...	.....	
		„ XII, Hosabettu Reserve.	376	...	...	...	376	...	.....	
		„ XI, Todar Reserve.	458	...	...	...	458	...	.....	
		„ XIII, Unjimale ..	..	...	3,200	...	3,200	...	No. 177 of 13th April 1891.	
	Uppinangadi.	„ I, The Shiradi Sisla Reserve.	19,200	...	...	...	19,200	...	.....	
		„ IV, The Bhagimalai.	6,400	...	...	...	6,400	...	.....	
		Total. ...	54,363	84·94	5,239	...	59,602	93·13	.....	
		Total of the Circle ...	1,238,993	1935·92	406,403	18,074	1,627,322	2542·69	.....	
	Grand Total of the three Circles.		3,271,861	5112·28	1,343,429	23,370	4,591,920	7174·87	.....	

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

Abstract.

District.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equvialent in square miles.
Northern Circle.						
Ganjam	54,436	85·05	18,320	...	72,756	113·68
Vizagapatam	2,520	3·93	6,440	...	8,960	14·
Godávari	220,938	345·22	46,730	...	267,668	418·23
Kistna	221,592	346·24	67,715	...	289,307	452·04
Anantapur	8,818	13·78	11,153	27	19,944	31·16
Bellary	49,145	76·79	18,727	966	66,906	104·54
Kurnool	155,025	242·23	528,775	...	683,800	1068·44
Total ...	7,12,474	1,113·24	697,860	993	1,409,341	2,202·09
Central Circle.						
Nellore	107,820	168·47	60,304	...	168,124	262·69
Cuddapah	227,988	356·23	37,183	...	265,171	414·33
Chingleput	80,983	126·54	12,621	...	93,604	146·26
North Arcot	275,187	429·98	57,399	4,303	328,283	512·94
South Arcot	94,418	147·53	10,519	...	104,937	163·96
Tanjore	5,852	9·14	17	..	5,869	9·17
Trichinopoly	90,303	141·10	11,665	...	101,968	159·33
Salem	437,843	684·13	49,458	...	487,301	761·41
Total ...	1,320,394	2,063·12	239,166	4,303	1,555,257	2,430·09
Southern Circle.						
Madura	242,629	379·11	72,107	16,230	298,506	466·41
Tinnevelly	274,012	428·14	89,123	..	363,135	567·40
North Coimbatore	75,064	118·69	236,160	1,844	310,280	484·81
South Coimbatore	362,261	566·03	...	...	362,261	566·03
Nilgiris	128,756	201·18	3,774	...	132,530	207·08
North Malabar	75,841	118·51	...	...	75,841	118·51
South Malabar	25,167	39·32	...	...	25,167	39·32
South Canara	54,363	84·94	5,239	...	59,602	93·13
Total ...	1,238,993	1,935·92	406,403	18,074	1,627,322	2,542·69
Grand Total ...	3,271,861	5,112·28	1,343,429	23,370	4,591,920	7,174,87

ANNUAL FORM No. 59-B.

Forest Department, Madras Presidency.

AREA of Reserved Lands, 1891-92.

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	NORTHERN CIRCLE.									
Ganjam.	West Goomsur.	Kaliamba ...	5,200	...	...	...	5,200	...	.....	
		Teleki ...	15,200	...	...	...	15,200	...	.....	
		Baibali ...	21,920	...	...	...	21,920	...	.....	
		Rogoda ...	16,000	...	...	...	16,000	...	.....	
		Darpangia ...	16,160	...	...	...	16,160	...	.....	
		Rambha ...	9,300	...	...	...	9,300	...	.....	
		Gullery ...	23,860	...	...	...	23,860	...	.....	
	East Goomsur.	Koolada ...	2,760	...	...	...	2,760	...	.....	
		Ambazara ...	32,000	...	...	...	32,000	...	.....	
		Chodiapalli ...	960	...	...	...	960	...	.....	
		Chondorgiri ...	18,320	...	...	18,320	...	...	No. 306 of 1st July 1891.	Transferred to reserved forests.
		Gundribadi ...	12,200	...	...	...	12,200	...	.....	
		Gogodo ...	15,240	...	...	...	15,240	...	.....	
		Paichalia ...	13,760	...	...	...	13,760	...	.....	
		Brahmanosai ...	8,080	...	...	...	8,080	...	.....	
	Buguda ...	Kurcholi ...	5,520	...	...	...	5,520	...	.....	
		Kriyamba ...	23,320	...	...	...	23,320	...	.....	
		Sandusalya ...	2,000	...	...	...	2,000	...	.....	
		Bodochendana ...	800	...	...	...	800	...	.....	
	Surada ...	Dhougam ...	2,400	...	...	...	2,400	...	.....	
		Pipalapanka ...	7,700	...	...	...	7,700	...	.....	
		Moondapitta ...	6,880	...	...	...	6,880	...	.....	
		Hukuma	4,160	...	...	...	4,160	...	.....	
		Rayigoda	6,700	...	...	...	6,700	...	.....	
	Berhampore...	Ramagodo ...	6,620	...	...	...	6,620	...	.....	
		Bainamari ...	3,750	...	...	...	3,750	...	.....	
		South Mohiri ...	3,730	...	...	...	3,730	...	.....	
		Bollibogoda ...	261	...	...	...	261	...	.....	
		Balakristnapuram.	164	...	...	...	164	...	.....	
		Chatrapur	695	...	...	...	695	...	.....	
		Dura	279	...	...	...	279	...	.....	
		Golobondo ...	379	...	...	...	379	...	.....	
		Podhora	760	...	...	...	760	...	.....	
		Mushidipolem ...	238	...	...	...	238	...	.....	
		Kusimi	625	...	...	...	625	...	.....	
		Bendaliya	163	...	...	...	163	...	.....	
		Mohoda	419	...	...	...	419	...	.....	
		Mushiyakalli ..	522	...	...	...	522	...	.....	
		Ankusapuram ..	138	...	...	...	138	...	.....	
		Mohugora ...	1,697	...	...	...	1,697	...	.....	
		Maharlapalli ...	924	...	...	...	924	...	.....	
		Virakrishnachandrapuram.	445	...	...	...	445	...	.....	
		Godohill	225	...	...	...	225	...	.....	
		Joronohill ...	1,002	...	...	...	1,002	...	.....	
		West Batukamarada.	179	...	...	...	179	...	.....	
		Nimmapuram ...	697	...	...	...	697	...	.....	
		Sikharapuram ...	260	...	...	...	260	...	.....	
		Shapuram	142	...	...	...	142	...	.....	
		Napier's Park ...	...	...	27	...	27	...	.....	Reserved under orders of the Collector.
	Chicacole ...	Tuluga	148	...	...	...	148	...	.....	
		Ampolu	225	...	...	...	225	...	.....	
		Singupuram ...	693	...	...	...	693	...	.....	
		Rana	107	...	...	...	107	...	.....	
		Rahimanpuram ...	274	...	...	...	274	...	.....	
		Koderu	279	...	...	...	279	...	.....	
		Jammu	...	...	175	...	175	...	No. 348 of 31st July 1891.	
		Godalam	...	...	125	...	125	...		
		Roukuhanumanthapuram, Nos. I, II and III.	...	...	1,520	...	1,520	...		
		Total ...	296,480	463·25	1,847	18,320	280,007	437·51		

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Northern Circle—*cont.*										
Vizagapatam.	Golgonda ...	Arlova	1,500	...	* 1,727	...	3,227	...	.....	
		Pedimkonda ...	1,000	...	* 1,472	...	2,472	...	.....	
		Kakurlakonda ...	1,500	...	* 424	...	1,924	...	.....	
		Venkatapuram ..	1,500	...	...	* 992	508	...	.....	
		Kodavalipudi ...	1,000	...	* 544	...	1,544	...	.....	
	Palkonda Agency.	Madalammakonda.	...	...	3,600	...	3,600	...	No. 499 of 26th Oct. 1891.	These include the areas of some reserves shown as reserved under other orders (Form No. 59 D) in 1890-91.
		Karakakonda ...	...	...	6,270	...	6,270	...	No. 500 of 26th Oct. 1891.	
		Barnakonda ...	...	...	16,240	...	16,240	...	No. 528 of 24th Nov. 1891.	
		Antikonda ...	...	...	6,800	...	6,800	...	No. 529 of 24th Nov. 1891.	
		Kadagandi ...	...	...	9,920	...	9,920	...	No. 530 of 24th Nov. 1891.	
		Total ...	6,500	10·16	46,997	992	52,505	82·04		
Godávari.	Peddápur ...	Raghavapatnam ...	12,160	...	...	12,160	...	...	No. 240 of 2nd April 1891.	8,560 acres excluded at settlement and 3,600 acres transferred to reserved forest.
		Sarlanka † ...	17,920	...	...	17,920	...	...	No. 241 of 2nd April 1891.	2,920 acres excluded at settlement and 15,000 acres transferred to reserved forest.
		Anantavaram ...	8,320	...	...	8,320	...	...	No. 242 of 2nd April 1891.	4,320 acres excluded at settlement and 4,000 acres transferred to reserved forest.
		Totapalle	3,520	...	...	3,520	...	...	No. 208 of 27th April 1891.	1,370 acres excluded at settlement and 2,150 acres transferred to reserved forest.
		Veligogola † ...	20,800	...	...	20,800	...	...	No. 215 of 27th April 1891.	8,800 acres excluded at settlement and 12,000 acres transferred to reserved forest.
		Ramasaram ...	2,500	...	...	...	2,500	...	.....	
		Kovida	2,100	...	...	2,100	...	...	No. 151 of 7th April 1891.	820 acres excluded at settlement and 1,280 acres transferred to reserved forest.
		Banadapalli ...	6,800	...	...	...	6,800	...	.....	
		Lododdi	8,400	...	...	...	8,400	...	.....	
		Vatangi	11,000	...	...	...	11,000	...	.....	
		Aminbada ...	5,600	...	...	...	5,600	...	.....	
		Anantagiri ...	3,900	...	...	...	3,900	...	.....	
		Laburti	8,100	...	...	...	8,100	...	.....	
		Doramamidi ...	7,200	...	...	...	7,200	...	.....	
		Verabhadram ...	11,200	...	...	...	11,200	...	.....	
		Jeddangi	6,700	...	...	...	6,700	...	.....	
		Annavaram ...	10,500	...	...	...	10,500	...	.....	
		Peddagurangi ...	5,800	...	...	...	5,800	...	.....	
		Lingamparti ...	7,600	...	...	...	7,600	...	.....	
		Devancheruvu ...	5,000	...	...	...	5,000	...	.....	
	Rajahmundry.	Lakkonda ...	13,000	...	...	...	13,000	...	.....	
		Molleru	10,000	...	...	...	10,000	...	.....	
		Sudikonda ...	5,300	...	* 1,580	...	6,880	...	.....	
		Mallavaram ...	6,500	...	...	...	6,500	...	.....	
		Tirumaliapalem ...	9,200	...	...	...	9,200	...	.....	

* Due to rectification of area.

† Wrongly spelt in 1890-91 year's return.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Northern Circle—*cont.*									
Godávari—*cont.*	Bhadráchalam.	Kanslur	6,200	...	...	6,200	...	...	No. 124 of 21st March 1891.	Transferred to reserved Forest.
		Walsugri	8,700	...	...	...	8,700	...	.....	
		Rekapalle Hills ...	107,700	...	...	...	107,700	...	.....	
	Ellore ...	Ramasingavaram ...	1,920	...	* 580	2,500	...	...	No. 167 of 13th April 1891.	Do.
	Delta ...	Upputer	10,000	...	...	...	10,000	...	.....	
	Tanuku Yernagúdem.	Kandikuppa ...	9,000	...	...	...	9,000	...	.....	
		Ungutur Blocks I and II.	4,500	...	...	...	4,500	...	.....	
	Yernágúdem ...	Jilugumilli ...	3,300	...	...	...	3,300	...	.....	
		Darbhagudem ...	2,200	...	...	...	2,200	...	.....	
		Barrinkalapadu ...	1,600	...	...	...	1,600	...	.....	
		Thaduvai ...	1,900	...	...	...	1,900	...	.....	
		Marlagudem ...	2,700	...	...	...	2,700	...	.....	
		Beddadavole ...	15,000	...	...	...	15,000	...	.....	
		Rajahmundram ...	400	...	...	...	400	...	.....	
		Nallacherla ...	11,000	...	...	...	11,000	...	.....	
		Kopilli	19,000	...	...	...	19,000	...	.....	
		Kovada	19,000	...	...	...	19,000	...	.....	
		Papikonda ...	21,000	...	...	...	21,000	...	.....	
		Total ...	454,240	709·75	2,160	73,520	382,880	598·25		
Kistná.	Bezváda ...	Kondapalle ...	33,997	...	...	* 13,275	20,722	...	.....	
		Kothur	8,293	...	...	† 7,593	700	...	No. 222 of 2nd May 1891.	† Deducted 363 acres by rectification of area and transferred 7,230 acres to Reserved Forest.
		Kondur	3,000	...	* 1,140	‡ 4,140	...	...	No. 31 of 15th Jan. 1892.	‡ Transferred to Reserved Forest.
	Guntúr ...	Kolakalúr	1,403	...	...	...	1,403	...	.....	
		Lam	987	...	...	...	987	...	.....	
		Gollámoodi ...	202	...	...	202	...	...	No. 14 of 19th Dec. 1891.	8 acres excluded at settlement and 194 acres transferred to Reserved Forest.
	Sattenapalle ...	Venkatayyapalem.	3,000	...	...	3,000	..	...	No. 428 of 21st Sept. 1891.	Transferred to Reserved Forest.
		Nevalipuri ...	11,870	...	...	11,870	...	...	No. 196 of 16th April 1891.	370 acres deducted by rectification of area and 11,500 acres transferred to Reserved Forest.
	Vinukonda ...	Bollapalli, Nos. I & II.	12,000	...	...	...	12,000	...	.....	
		Koppukonda ...	5,000	...	...	...	5,000	...	.....	
		Guttikonda ...	37,760	...	...	37,760	...	...	No. 228 of 8th May 1891.	Transferred to Reserved Forest.
	Palnád ...	Pasvemula ...	22,782	...	...	...	22,782	...	.....	
		Kandlagunta ...	34,947	...	...	...	34,947	...	.....	
		Tangeda ... II	1,395	...	...	...	1,395	...	.....	
		TummurukoduNoII	2,940	...	...	...	2,940	...	.....	
		Do. No. III	3,730	...	...	...	3,730	...	.....	
		Mutukur	31,360	...	...	...	31,360	...	.....	

* Due to rectification of area.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Northern Circle—*cont.*									
Kistna—*cont.*	Bápatla ...	Nayanapalli ...	152	...	...	152	...	...	No. 190 of 16th April 1891.	Transferred to Reserved Forest.
		Vedhullapalle Extension.	10	...	...	10	...	...	No. 387 of 1st Sept. 1891.	Do.
		Orr's Tope ...	131	...	...	131	...	...	No. 550 of 9th Dec. 1891.	Deducted 3 acres by rectification of area and transferred to Reserved Forests 128 acres.
		Weld, Nos. I & II...	75	...	...	75	...	...	No. 430 of 21st Sept. 1891.	Transferred to Reserved Forest.
	Bandar ...	Gopuvanipalem ...	206	...	...	206	...	...	No. 549 of 9th Dec. 1891.	Do.
		Palakayatippa ...	2,880	...	* 440	3,320	...	...	No. 491 of 20th Oct. 1891.	Do.
		Total ...	218,120	340·81	1,580	81,734	137,966	215·57		
Anantapur.	Gooty ...	Peddadoddi ...	3,200	...	...	...	3,200	...	.....	
		Jakkalacheruvu ...	3,200	...	...	...	3,200	...	.....	
		Pamidi	640	...	...	640	...	...	No. 401 of 12th Sep. 1891.	Transferred to Reserved Forest.
		Nagasamudram N. & S.	9,600	...	...	...	9,600	...	.....	
		Cutturmulla ...	7,680	...	...	...	7,680	...	.....	
		Bhadrampalle ...	2,560	...	1,665	...	4,225	...	.....	Due to rectification of area.
		Marutla	11,520	...	...	...	11,520	...	.....	
		Tarramalla ...	8,960	...	...	...	8,960	...	.....	
		Yadaki	5,120	...	...	...	5,120	...	.....	
		Guntakal I, II & III.	900	...	...	10	890	...	.....	By rectification of area.
	Muchukota ...	Muchukota ...	6,400	...	* 15,359	...	21,759	...	.....	
		Durgam	3,200	...	...	...	3,200	...	.....	
		Kudair	4,480	...	...	...	4,480	...	.....	
		Uparapalli ...	640	...	...	...	640	...	.....	
		Dadithota	1,920	...	...	...	1,920	...	.....	
		Yellutla	5,120	...	* 4,062	...	9,182	...	.....	
		Chillawaripalle ...	3,840	...	...	...	3,840	...	.....	
		Konakuntla ...	1,280	...	* 320	...	1,600	...	.....	
		Nairjampalle ...	1,920	...	* 365	...	2,285	...	.....	
		Yelanur	320	...	...	...	320	...	.....	
	Dharmavaram.	Gootoor, E. & W. ...	6,400	...	* 1,404	...	7,804	...	.....	
		Boodikonda ...	320	...	* 955	1,275	...	...	No. 429 of 21st Sept. 1891.	Transferred to Reserved Forest.
		Kalyándrúg ...	960	...	* 592	...	1,552	...	.....	
		Ramgherry ...	10,240	...	...	...	10,240	...	.....	
		Bhadrapur ...	3,200	...	* 147	...	3,347	...	.....	
		Nayalakota ...	7,680	...	* 5,177	...	12,857	...	.....	
		Penukonda Hill ...	1,600	...	* 3,346	...	4,946	...	.....	
		Somandapally ...	10,240	...	...	* 458	9,782	...	.....	
		Yerlampalle ...	2,240	...	* 1,310	...	3,550	...	.....	
		Mallappakonda ...	5,120	...	...	...	5,120	...	.....	
		Mallakaveimla konda.	960	...	* 1,178	...	2,138	...	.....	
		Janavaripalle ...	3,200	...	...	...	3,200	...	.....	
	Penukonda ...	Neiradikonda ...	2,560	...	...	2,560	...	...	No. 427 of 21st Sept. 1891.	Deducted 343 acres by rectification of area and transferred to Reserved Forest 2,217 acres.
		Agraharam ...	2,300	...	...	...	2,300	...	.....	
		Venglumcheruvu.	2,880	...	...	...	2,880	...	.....	

* Due to rectification of area by survey.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		NORTHERN CIRCLE—*cont.*								
Anantapur —*cont.*	Hindupur ...	Yerrakonda ...	4,420	...	* 3,309	...	7,729	...	.....	
		Amagondapaliem ...	16,360	...	...	* 588	15,772	...	.....	
		Dokkalakonda ...	2,880	...	* 4,540	...	7,420	...	.....	
		Kondur	400	...	* 207	...	607	...	.....	
		Gopidevarapalle ...	1,920	...	...	* 36	1,884	..	.....	
		Total ...	168,880	263·09	43,936	5,567	206,749	323·05		
Bellary.	Adóni ...	Ganekolu	1,118	...	...	† 48	1,070	...	.....	
		Badanahalu ...	940	...	...	940	...	...	No. 384 of 1st Sept. 1891.	Transferred to Reserved Forest.
		Katalam	658	...	...	658	...	...	No. 526 of 24th Nov. 1891.	Do.
		Sulekeri	1,342	...	* 38	...	1,380	...	.....	
		Nundavaram ...	969	...	...	969	...	...	No. 27 of 15th Jan. 1892.	11 acres excluded at settlement and 958 acres transferred to Reserved Forest.
		Ráyachóti	1,863	...	* 29	...	1,892	...	.....	
		Kurimetla ...	3,341	...	...	† 529	2,812	...	.....	
		Banavasi	1,964	...	* 145	2,109	...	...	No. 533 of 24th Nov. 1891.	Transferred to Reserved Forest.
		Kotekallu	2,569	...	* 6	...	2,575	...	.....	
		Ádóni, E. & W. ...	5,337	...	...	...	5,337	...	.....	
		Kupgul	4,650	...	...	† 12	4,638	...	.....	
		Tungabhadra ...	4,633	...	...	...	4,633	...	.....	
		Kosgi	2,970	...	...	† 19	2,951	...	.....	
		Kudbúr	2,956	...	...	...	2,956	...	.....	
		Bilchalu	...	...	916	...	916	...	No. 251 of 29th May 1891.	
		Kanchagara Bilagallu.	...	...	856	...	856	...		
		Holalagondi ...	...	...	906	...	906	...		
		Muddatamagi. ...	...	...	317	...	317	...		
		Virupapuram ...	...	...	136	...	136	...		
		Pagaluchukkavanka.	...	...	241	...	241	...		
		Ramadurgamkonda.	...	...	337	...	337	..		
		Nagaradona ...	...	...	140	...	140	...		
		Kurugodu, W. & N. W.	1,000	...	...	1,000	...	...	Nos. 460 and 548 of 15th Oct. 1891 and 9th Dec. 1891 respectively.	Transferred to Reserved Forest.
		Halekota	640	...	...	640	...	...	No. 413 of 14th Sept. 1891.	Do.
	Bellary ...	Suguru	500	...	* 30	...	530	...	.....	
		Nadivi	450	...	...	† 25	425	...	.....	
		Vonnahalli ...	111	...	...	† 6	105	...	.....	
		Mundrigi	80	...	...	† 32	48	...	.....	
		Rayadurgam ...	6,000	...	...	6,000	...	...	No. 148 of 7th April 1891.	Transferred to Reserved Forest.
		Dharmapuri ...	4,100	...	...	...	4,100	...	.....	
		Boodikonda ...	1,000	...	...	1,000	...	...	No. 384 of 1st Sept. 1891.	34 acres excluded at settlement and 966 acres transferred to Reserved Forest.
		Gundu	5,456	...	...	5,456	...	...	No. 107 of 11th March 1891.	Transferred to Reserved Forest.
	Sandúr ...	Hospet	5,000	...	...	† 1,970	3,030	...	.....	
		Oblagudi	692	...	...	...	692	...	.....	
		Billekal	14,080	...	...	† 1,633	12,447	..	.....	
		Buckasagar ...	6,000	...	...	...	6,000	...	.....	
		Bandri	7,000	...	* 9,239	...	16,239	...	.....	
		Sandúr	40,000	...	...	...	40,000	...	.....	Leased Forest.
	Kúdligi ...	Banivikal	3,000	...	* 564	...	3,564	...	.....	
		Nimblagiri ...	4,800	...	...	† 8	4,792	...	.....	
		Gudekota	7,000	...	...	...	7,000	...	.....	
		Harada	16,400	...	...	...	16,400	...	.....	
		Sogay	4,200	...	...	...	4,200	...	.....	

* Due to rectification of area by survey. † Excluded at settlement.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		NORTHERN CIRCLE—*cont.*								
Bellary—*cont.*	Kúdligi—*cont.*	Jitnakatta ...	12,646	...	...	...	12,646	...	.....	
		Jangukalgutta ...	12,882	...	...	...	12,882	...	.....	
		Alagilavada ...	1,956	...	...	* 56	1,900	...	.....	
		Uchirgidrug ...	4,291	...	...	* 91	4,200	...	.....	
		Sunkadakal, East...	843	...	...	...	843	...	.....	
		Kakkuppi	...	...	9,000	...	9,000	...	No. 227 of 8th May 1891.	
		Ramadurgam ...	...	...	2,500	...	2,500	...		
		Total ...	195,437	305·37	25,400	23,201	197,636	308·81		
Kurnool.	Cumbum and Márkápur.	Cumbum	217,000	...	...	...	217,000	...	.....	
	Márkápur ...	Márkápur	181,875	...	...	...	181,875	...	.....	
	Cumbum	Western Veligondas.	17,210	...	...	...	17,210	...	.....	
		Uyyalavada ...	56,180	...	* 20,620	76,800	...	...	No. 154 of 7th April 1891.	Transferred to Reserved Forest.
	Pattikonda and Ramallakota.	South Dhone ...	4,000	...	...	...	4,000	...	.....	
		North Dhone ...	10,000	...	...	...	10,000	...	.....	
	Pattikonda ...	Pendikallu ...	...	...	2,570	...	2,570	...	No. 77 of 23rd Feb. 1892.	
		Kapatralla ...	...	...	2,880	...	2,880	...		
		Karumanchi ...	...	...	1,550	...	1,550	...		
		Katamkonda ...	...	...	3,430	...	3,430	...		
		Gundlakonda ...	...	...	4,690	...	4,690	...		
	Nandyál and Nandikótkur.	Nandyál	185,700	...	...	185,700	...	...	No. 168 of 13th April 1891.	Transferred to reserved forest.
	Nandikótkur ...	Nandikótkur ...	368,770	...	...	368,770	...	...	No. 197 of 16th April 1891.	112,770 acres excluded by rectification of area and 256,000 acres transferred to reserved forest.
	Ramallakota ...	Ramallakota, East.	1,000	...	...	1,000	...	..	No. 289 of 22nd June 1891.	Transferred to Reserved Forest.
		Ramallakota, West.	1,000	...	...	1,000	...	...	No. 293 of 22nd June 1891.	Do.
		Lanjabanda ...	2,000	...	...	2,000	...	...	No. 457 of 15th Oct. 1891.	Do.
		Yaperlapad ...	3,500	...	...	3,500	...	...	No. 43 of 15th Jan. 1892.	116 acres excluded at settlement and 3,384 acres transferred to Reserved Forest.
		Gadidamadugu ...	3,000	...	...	3,000	...	...	No. 116 of 21st March 1891.	109 acres excluded at settlement and 2,891 acres transferred to Reserved Forest.
		Total ...	1,051,235	1642·55	35,740	641,770	445,205	695·63		
		Total of the Circle.	2,390,392	3734·98	157,660	845,104	1,702,948	2660·86		
		CENTRAL CIRCLE.								
Nellore.	Kanigiri ...	Chimakurthi ...	7,500	...	...	...	7,500	...	.....	
		Kanigiri-Durgam.	1,500	...	...	...	1,500	...	.....	
		Nandavanam ...	18,000	...	...	...	18,000	...	.....	
		Vedullacheruvu ...	9,000	...	...	...	9,000	...	.....	
		Macherla, Chalamcherla.	12,236	...	...	12,236	...	...	No. 189 of 16th April 1891.	Transferred to Reserved Forest.
	Kávali ...	Kávali	2,933	...	...	...	2,933	...	...	Do.
		Tummalapenta, N.	1,300	...	...	1,300	...	...	No. 546 of 9th Dec. 1891.	
		Mungamore ...	94	...	...	...	94	...	.....	
		Kadanutla ...	289	...	...	...	289	...	.....	
		Talapalem ...	761	...	...	...	761	...	.....	
		Kávali	1,511	...	...	...	1,511	...	.....	

* Excluded at settlement. † By verification of area.

Area of Reserved Lands, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	CENTRAL CIRCLE—*cont.*									
Nellore—*cont.*	Kávali—*cont.*	Kolladinne ...	561	...	...	...	561	...	.....	
		Musunur	1,014	...	...	...	1,014	...	.....	
		Anamadugu ...	941	...	...	...	941	...	.....	
		Chennayyapolliem.	1,161	...	...	...	1,161	...	.....	
		Tummalapenta ...	2,476	...	...	...	2,476	...	.....	
		Rudrakota ...	343	...	...	...	343	...	.....	
	Udayagiri ...	Udayagiri-Durgam.	13,440	...	...	* 2,160	11,280	...	.....	
		Yerrakondas ...	14,080	...	...	...	14,080	...	.....	
		Udayagiri (East) & Appasamudrum.	1,500	...	...	1,500	...	...	No. 174 of 13th April 1891.	Transferred to reserved forest.
		Udayagiri-Veligondas.	60,140	...	...	...	60,140	...	.....	
	Nellore ...	Nellore ...	2,560	...	...	...	2,560	...	.....	
		Kondlapudi ...	1,500	...	...	1,500	...	...	No. 532 of 24th Nov. 1891.	Do.
	Gúdúr ...	Striharikota and its outliers.	35,710	...	...	...	35,710	...	.....	
		Kottapatam Plantation.	385	...	...	...	385	...	.....	
		Tamminapatnam, W.	350	...	...	350	...	...	No. 172 of 13th April 1891.	Do.
		Momidi ...	2,500	...	...	2,500	...	...	No. 169 of 13th April 1891.	Do.
		Vedicherla ...	850	...	...	850	...	...	No. 414 of 16th Sept. 1891.	Do.
		Kottapatam ...	2,500	...	...	...	2,500	...	.....	
		Yellaséri ...	2,080	...	* 438	2,518	...	...	No. 173 of 13th April 1891.	Do.
	Rápúr ...	Sydápuram ...	2,080	...	...	...	2,080	...	.. ..	
		Marlapudi ...	4,550	...	...	...	4,550	...	.....	
		Pategunta ...	1,600	...	...	* 100	1,500	...	...	
		Palúru	210	...	...	210	...	...	No. 117 of 18th March 1891.	Do.
		Cherlopalli ...	3,360	...	...	...	3,360	...	.....	
		Potukonda ...	1,860	...	...	1,860	...	...	No. 134 of 3rd April 1891.	Do.
		Guttikonda ...	180	...	...	180	...	...	No. 383 of 1st Sept. 1891.	Do.
		Marellakonda ...	400	...	...	400	...	...	No. 326 of 14th July 1891.	Do.
		Veminabhi ...	2,080	...	...	...	2,080	...	.....	
		Kakalakonda ...	1,850	...	...	1,850	...	...	No. 431 of 21st Sept. 1891.	Do.
		Yerragondas ...	19,000	...	...	...	19,000	...	.....	
		Kummaragunta ...	440	...	...	440	...	...	No. 415 of 16th Sept. 1891.	Do.
		Podalakur ...	2,500	...	...	...	2,500	...	...	
		Nernur	2,400	...	...	2,400	...	...	No. 497 of 26th Oct. 1891.	Deducted 1,210 acres by rectification of area and transferred 1,190 acres to reserved forest.
		Griddalúr	700	...	...	700	...	...	No. 119 of 21st March 1891.	Transferred to reserved forest.
		Rápúr-Veligondas...	30,720	...	...	30,720	...	...	No. 466 of 14th Oct. 1891.	Do.
		Total ...	273,145	426·79	438	63,774	209,809	327·83		

* By rectification of area.

Area of Reserved Lands, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Central Circle—*cont.*									
Cuddapah.	Kódúr ...	Settikunta ...	960	...	...	...	960	...	.....	
		Cheyavaram ...	4,480	...	...	...	4,480	...	.....	
		Kódúr	2,160	...	...	...	2,160	...	.....	
		Gotimanikona ...	3,840	...	...	3,732	108	...	No. 458 of 15th Oct. 1891.	Transferred to reserved forest.
		Yerraguntlakota ...	1,920	...	...	...	1,920	...	.....	
		Avalapenta ...	960	...	*474	1,434	...	...	No. 403 of 12th Sept. 1891.	Do.
		Mushtiyeru ...	4,480	...	*1,952	6,432	...	...	No. 547 of 9th Dec. 1891.	Do.
		Tippayapalli ...	960	...	...	...	960	...	.....	
		Kodivengamabavi.	2,400	...	...	...	2,400	...	.....	
	Rájampet ...	Marriutla	6,400	...	...	...	6,400	...	.....	
		Reddipalle Plantation.	516	...	...	...	516	...	.....	
		Ananthasamudram.	6,400	...	...	...	6,400	...	.....	
		Saripaya Ghat ...	2,560	...	...	...	2,560	...	.....	
		Badugantapalle ...	3,520	...	...	...	3,520	...	.....	
		Vattalur Hill ...	320	...	...	...	320	...	.....	
	Rájampet and Kódúr.	Seshachellam and Rollamadugu.	3,840	...	...	...	3,840	...	.....	
		Salivendra ...	6,400	...	...	...	6,400	...	.....	
		Chitvel	10,240	...	...	...	10,240	...	.....	
	Rájampet and Ráyachóti.	Gadikota	3,538	...	...	...	3,538	...	.....	
		Yerrakonda ...	8,320	...	...	...	8,320	...	.....	
	Rájampet, Sidhout and Ráyachóti.	Cheyer	11,360	...	...	...	11,360	...	.....	
	Rájampet and Sidhout.	Kanakalakonda ...	6,400	...	...	...	6,400	...	.....	
		Patur	7,680	...	...	...	7,680	...	.....	
		Kokaletikanama ...	14,420	...	...	...	14,420	...	.....	
		Kothur	22,720	...	...	...	22,720	...	.....	
	Sidhout ...	Malliamkonda ...	3,840	...	...	...	3,840	...	.....	
		Do. addition ...	1,280	...	...	...	1,280	...	.....	
		Vontimitta ...	5,760	...	...	...	5,760	...	.....	
		Konarazupalle ...	9,600	...	...	...	9,600	...	.....	
		Turupukonda ...	30,080	...	...	...	30,080	...	.....	
		Ippakanama ...	1,600	...	...	...	1,600	...	.....	
	Badvél and Sidhout.	Ramapuram ...	7,680	...	...	...	7,680	...	.....	
	Cuddapah, Badvél and Sidhout.	Lankamalai ...	112,640	...	...	...	112,640	...	.....	
	Cuddapah and Sidhout.	Kanamalapalle ...	5,255	...	...	...	5,255	...	.....	
	Cuddapah, Ráyachóti and Sidhout.	Palkonda ...	81,920	...	...	...	81,920	...	.....	
	Badvél ...	Kavalakuntla ...	1,600	...	...	...	1,600	...	.....	
		Gopavaram ...	13,440	...	...	...	13,440	...	.....	
		Kalasapad ...	6,400	...	...	...	6,400	...	.....	
		Sancherla ...	5,760	...	...	...	5,760	...	.....	
		Tsallagirigulla ...	1,280	...	...	...	1,280	...	.....	
		Badvél	1,920	...	...	...	1,920	...	.....	
		Ganugapenta ...	3,200	...	...	...	3,200	...	.....	

* By rectification of area.

Area of Reserved Lands, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	CENTRAL CIRCLE—*cont.*									
Cuddapah—*cont.*	Badvel and Proddutur.	Kottakota and Dasarapalle.	104,960	...	...		104,960	...	.....	
		Kanchelamoram ...	8,960	...	...	...	8,960	...	.....	
		Ganganapalle ...	57,600	...	...	...	57,600	...	.....	
	Cuddapah and Rayachóti.	Idupalapaya ...	28,160	...	...	...	28,160	...	.....	
		Redlacheruvu ...	5,120	...	...	...	5,120	...	.....	
		Chelakampalle ...	6,400	...	...	...	6,400	...	.....	
		Kommaddi ...	1,600	...	...	...	1,600	...	.....	
		Tummalur ...	3,200	...	...	...	3,200	...	.....	
		Gonamakalapalle ...	1,280	...	...	...	1,280	...	.....	
	Cuddapah and Proddutur.	Bhanakotamala ...	13,600	...	...	...	13,600	...	.....	
		Mallela	5,120	...	...	...	5,120	...	.....	
	Proddutur ...	Kondasankesula ...	4,480	...	...	...	4,480	...	.....	
		Dabbudapalle ...	3,280	...	...	...	3,280	...	.....	
		Dhodiyam	2,720	...	...	...	2,720	...	.....	
		Malamidikambaladinne.	3,440	...	...	...	3,440	...	.....	
		Penner	640	...	...	...	640	...	.....	
		Gandikota	9,920	...	...	...	9,920	...	.....	
		Yamavaram ...	1,600	...	...	...	1,600	...	.....	
		Kosinepalle ...	7,040	...	...	...	7,040	...	.....	
		Nidijuvvi	2,880	...	...	...	2,880	...	.....	
		Kondapuram ...	3,840	...	...	...	3,840	...	.....	
	Rayachóti ...	Sibbyala	340	...	...	...	340	...	... ..	
		Tsundupalle ...	1,480	...	...	...	1,480	...	.....	
		Madhavaram ...	5,900	...	...	...	5,900	...	.....	
		Brahmanayerragudi	5,760	...	...	...	5,760	...	.....	
		Hassanapuram ...	12,160	...	...	...	12,160	..	.....	
		Mudumpad slopes...	5,760	...	...	...	5,760	...	.....	
		Wongimalla ...	10,880	...	...	...	10,880	...	.....	
	Rayachóti and Váyalpád.	Urukonda	8,960	...	...	...	8,960	...	.....	
	Rayachóti, Madanapalle and Váyalpád.	Rekkalakonda ...	6,400	...	...	...	6,400	...	.....	
	Kadiri and Cuddapah.	Gorivikanama ...	28,800	...	...	...	28,800	...	.....	
		Dorigallu ...	30,720	...	...	...	30,720	...	.....	
	Kadiri ...	Ishwaramala ...	15,360	...	...	...	15,360	...	.....	
		Kokanti ...	2,000	...	...	...	2,000	...	.....	
		Kadiri ...	10,240	...	...	...	10,240	...	.....	
		Vellichelamalla ...	3,200	...	*360	3,560	...	...	No. 220 of 2nd May 1891.	Transferred to reserved forest.
		Nigadi and Tirumaladevarakonda.	29,240	...	...	...	29,240	...	.....	
		Kukkarazukonda ...	5,120	...	...	2,720	2,400	...	No. 541 of 4th Dec. 1891.	Do.
		Tumala ...	25,600	...	...	...	25,600	...	.....	
		Malakavemala ...	1,920	...	...	...	1,920	...	.....	
		Tummalamala ...	6,400	...	...	...	6,400	...	... ..	
		Kondagamerla ...	3,200	...	...	...	3,200	...	.....	
		Somarazumala, East	1,280	...	...	...	1,280	...	.....	
		Goduvelagala ..	1,920	...	...	...	1,920	...	.....	
		Mudupalajuvvi ...	1,440	...	...	1,440	....	...	No. 474 of 14th Oct. 1891.	Excluded 214 acres by rectification of area and transferred 1,226 acres to reserved forest.
	Madanapalle...	Tavalam ...	5,120	...	...	...	5,120	...	.....	
		Madhanikonda ...	1,750	...	...	1,750	...	...	No. 386 of 1st Sept. 1891.	Transferred to reserved forest.
		Pentzapad ...	2,870	...	...	...	2,870	...	.....	
		Horsleykonda ...	15,500	...	...	...	15,500	...	.....	
		Avalakonda ...	8,370	...	...	...	8,370	...	.....	

* By rectification of area.

Area of Reserved Lands, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		CENTRAL CIRCLE—*cont.*								
Cuddapah—*cont.*	Madanapalle—*cont.*	Mothugamala ...	2,560	...	* 114	2,674	...	...	No. 519 of 16th Nov. 1891.	Transferred to reserved forest.
		Mallaiakonda ...	15,023	...	...	...	15,023	...	.....	
		Nallakonda ...	3,200	...	* 656	3,856	...	...	No. 405 of 12th Sept. 1891.	Do.
		Pulikonda	2,560	..	...	2,560	...	...	No. 472 of 14th Oct. 1891.	Excluded 100 areas by rectification of area and transferred 2,460 acres to reserved forest.
		Potapolu	364	...	...	...	364	...	.....	
		Kukkarazupalle ...	1,660	...	...	1,660	...	...	No. 456 of 15th Oct. 1891.	Transferred to reserved forest.
	Madanapalle and Váyalpád	Tarikonda	6,400	...	...	...	6,400	...	.....	
		Gutapaliem ...	2,560	...	...	...	2,560	...	.....	
		Nurukupalakonda...	8,820	...	...	...	8,820	...	.....	
	Váyalpád ...	Yellutla	4,840	...	...	...	4,840	...	.....	
		Gajjbuchikona ...	320	...	...	...	320	...	.....	
		Yerramoralajedu ...	3,680	...	...	...	3,680	...	.....	
		Marella	7,680	...	...	...	7,680	...	.....	
		Ankalammakonda...	2,800	...	...	...	2,800	...	.....	
		Doddipalle ...	2,560	...	...	1,981	579	...	No. 185 of 16th April 1891.	Do.
		Sorakayalapeta ...	2,560	...	...	...	2,560	...	.....	
		Peddamallela ...	3,200	...	* 498	3,698	...	...	No. 464 of 14th Oct. 1891.	Do.
		Talakona	19,840	...	...	...	19,840	...	.....	
		Bhakarapet ...	9,800	...	...	...	9,800	...	.....	
		Total ...	1,064,006	1662·51	4,054	37,497	1,030,563	1610·25		
Chingleput.	Tiruvallúr ...	Palavakkam ...	2,511	...	...	2,511	...	...	No. 527 of 24th Nov. 1891.	Do.
		Attantangal ...	268	...	...	...	268	...	.....	
		Nayar	300	...	...	...	300	...	.....	
		Erumaivettipalaiyam.	555	...	...	...	555	...	.....	
		Kavalur	240	...	...	...	240	...	.....	
		Manali	1,485	...	...	...	1,485	...	.....	
		Apasamudram ...	595	...	...	...	595	...	.....	
		Kuruvithittu ...	300	...	...	...	300	...	.....	
		Periyaoblaburam ...	66	...	...	...	66	...	.....	
		Elavur	179	...	...	...	179	...	.....	
		Chinnaoblaburam ...	65	...	...	...	65	...	.....	
		Siruvalipettai, A ...	105	...	...	...	105	...	.....	
		Do. B ...	54	...	...	...	54	...	.....	
		Vengathur ...	312	...	...	312	...	...	No. 404 of 12th Sept. 1891.	Do.
		Budur	86	...	...	...	86	...	.....	
		Siruvadu	373	...	...	...	373	...	.....	
		Nemalur	980	...	...	...	980	...	.....	
		Irukulam	...	...	776	...	776	...	No. 164 of 13th April 1891.	
		Kuvakolli	...	...	228	...	228	...	No. 166 of 13th April 1891.	
		Nelvoyi	...	...	162	...	162	...	No. 187 of 16th April 1891.	
		Kalathur	...	...	212	...	212	...	No. 165 of 13th April 1891.	
		Nayapakkam, A ...	...	...	1,421	...	1,421	...	No. 216 of 27th April 1891.	
		Do. B ...	...	...	164	...	164	...	No. 209 of 27th April 1891.	
		Do. C ...	...	...	105	...	105	...	No. 217 of 27th April 1891.	

* By rectification of area.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Central Circle—*cont.*									
Chingleput—*cont.*		Anjur	1,514	...	...	1,514	...	...	No. 102 of 10th March 1891.	Transferred to reserved forest.
		Tirumani	639	...	...	639	...	...	No. 108 of 11th March 1891.	
		Gudalur	2,744	...	...	...	2,744	...	.....	
		Senkunram ...	1,232	...	...	1,232	...	...	No. 120 of 21st March 1891.	Do.
		Vattambakkam ...	694	...	...	694	...	...	No. 213 of 27th April 1891.	
		Mambakkam ...	766	...	...	...	766	...	.....	
		Kumili	690	...	...	690	...	...	No. 152 of 7th April 1891.	
		Kattur	2,960	...	...	2,960	...	...	No. 221 of 2nd May 1891.	Do.
		Sirukunram, A ...	869	...	...	869	...	...	No. 163 of 13th April 1891.	
		Do. B ...	378	...	...	378	...	...	No. 132 of 3rd April 1891.	
		Melamaiyyur ...	49	...	...	...	49	...	.....	
		Achcharapakkam.	* 216 75	...	809	...	*a* 1,025 75	...	*a* No. 74 of 16th Feb. 1892.	
		Lattur	1,011	...	...	...	1,011	...	.....	
		Nedumaram ...	198	...	...	...	198	...	.....	
		Venmani ...	238	...	...	...	238	...	.....	
		Madayambakkam	241	...	...	...	241	...	.....	
		Sattamai	135	...	...	...	135	...	.....	
		Kattugudalur ...	* 1,567 1,805	...	497	...	*b* 2,064 1,805	...	*b* No. 74 of 16th Feb. 1892.	
	Chingleput ...	Rajupalliem ...	* 500 56	...	180	...	*c* 680 56	...	*c* No. 74 of 16th Feb. 1892.	
		Kurumbarai ...	58 192	...	179	...	*d* 237 192	...	*d* No. 259 of 11th June 1891.	
		Endathur ...	157 11	...	114	...	*e* 271 11	...	*e* No. 74 of 16th Feb. 1892.	
		Tandalam, A and B	* 768 242	...	87	...	*f* 855 242	...	*f* No. 74 of 16th Feb. 1892.	
		Siruhallur ...	316 187	...	151	...	*g* 467 187	...	*g* No. 263 of 11th June 1891.	
		Kannimangalam ...	142	...	...	...	142	...	.....	
		Nariamputtur ...	326	...	...	...	326	...	.....	
		Karukoli	600	...	...	...	600	...	.....	
		Kadalamangalam	731	...	...	...	731	...	.....	
		Vadatanur ...	1,078	...	...	...	1,078	...	.....	
		Vinayagavallur ...	127	...	...	...	127	...	.....	
		Kunamkolattur ...	106	...	...	...	106	...	.....	
		Bopanallur ...	538	...	...	...	538	...	.....	
		Muthukadu ...	86	...	...	...	86	...	.....	
		Indalur	* 288	...	136	...	424	...	No. 265 of 11th June 1891.	
		Poraiyur	...	...	123	...	123	...	No. 260 of 11th June 1891.	
		Gudalur	* 901	...	484	...	1,385	...	No. 74 of 16th Feb. 1892.	
		Puragal	* 250	...	57	...	307	...		
		Koliyalam ...	* 418	...	747	...	1,165	...		
		Oratti	...	...	348	...	348	...		
		Irumbili	* 285	...	...	...	285	...	No. 262 of 11th June 1891.	
		Extension of Kolattur.	...	...	87	...	87	...	No. 492 of 26th Oct. 1891.	
		Extension of Kayar.	...	...	470	...	470	...		
		Madambakkam ...	567	...	...	...	567	...	.....	
	Saidápet ...	Arasankalani ...	185	...	...	185	...	...	No. 133 of 3rd April 1891.	Transferred to reserved forest.
		Kovilpidagai ...	377	...	...	377	...	...	No. 385 of 1st Sept. 1891.	
		Tirusulam ...	270	...	...	270	...	...	No. 153 of 7th April 1891.	Excluded 10 acres at settlement and transferred 260 acres to reserved forest.
		Total ...	36,257	56·65	7,537	12,631	31,163	48·69		

* The variations are due to formation of blocks under separate names.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		CENTRAL CIRCLE—*cont.*								
North Arcot.	Chittoor ...	Veerasettipalle ...	7,587	...	...	...	7,587	...	.....	
		Chittapara ...	4,850	...	...	...	4,850	...	.....	
		Basavapalle, A and B.	2,027	...	...	2,027	...	...	Nos. 333 and 334 of 23rd July 1891.	90 acres excluded at settlement and 1,937 acres transferred to reserved forest.
		Mahimandalam ...	2,522	...	...	2,522	...	...	No. 357 of 8th Aug. 1891.	6 acres excluded at settlement and 2,516 acres transferred to reserved forest.
		Irala	16,130	...	...	...	16,130	...	.....	
		Santapet	2,276	...	...	2,276	...	...	No. 292 of 22nd June 1891.	180 acres excluded at settlement and 2,096 acres transferred to reserved forest.
		Chittoor	360	...	...	...	360	...	.....	
		Bommasamudram	...	...	1,242	...	1,242	...	No. 462 of 14th Oct. 1891.	
		Vavilitola ...	...	...	2,495	...	2,495	...		
		Tavanampalle ...	...	...	2,060	...	2,060	...		
		Putalapattu ...	...	...	2,917	...	2,917	...		
	Chandragiri ...	Nagaputla ...	8,320	...	...	...	8,320	...	.....	
		Mungilpattu ...	23,040	...	...	...	23,040	...	.....	
		Tirupati Hill extension.	...	...	5,840	...	5,840	...	No. 454 of 15th Oct. 1891.	
	Palmanér ...	Charugallu ...	19,200	...	...	19,200	...	...	No. 307 of 1st July 1891.	289 acres excluded at settlement and 18,911 acres transferred to reserved forest.
	Gudiyátam ...	Pedunaigdrug ...	12,800	...	...	...	12,800	...	.....	
		Panamadangi ...	9,600	...	...	...	9,600	...	.....	
		Paradurami extension.	2,500	...	...	...	2,500	...	.....	
		Sinnagunta ...	6,400	...	...	...	6,400	...	.....	
		Naickanari extension.	1,280	...	...	1,280	...	...	No. 354 of 3rd Aug. 1891.	Transferred to reserved forest.
		Mordana do.	9,600	...	...	...	9,600	...	.....	
		Gundlapalli ...	8,420	...	...	...	8,420	...	.....	
		Pallalakuppam ...	6,212	...	...	...	6,212	...	.....	
		Karapattu ...	8,388	...	...	...	8,388	...	.....	
	Vellore ...	Ambur extension	25,600	...	...	...	25,600	...	.....	
		Arasampet ...	18,000	...	...	...	18,000	...	.....	
		Attiyur	4,880	...	...	...	4,880	...	.....	
		Vellakal	5,280	...	...	...	5,280	...	.....	
		Kelur	3,537	...	...	3,537	...	...	No. 288 of 22nd June 1891.	671 acres excluded at settlement and 2,866 acres transferred to reserved forest.
		Allialamangalam	10,062	...	...	...	10,062	...	.....	
		Kappalur ...	1,267	...	...	1,267	...	...	No. 125 of 21st March 1891.	153 acres excluded at settlement and 1,114 acres transferred to reserved forest.
	Pólúr ...	Malayalam ...	12,800	...	...	12,800	...	...	No. 353 of 6th Aug. 1891.	1,338 acres excluded at settlement and 11,462 acres transferred to reserved forest.
		Santhavasal ...	8,500	...	...	...	8,500	...	.....	
		Mulakadu ...	17,000	...	...	...	17,000	...	.....	
	Arcot ...	Satur	1,048	...	...	1,048	...	...	No. 273 of 17th June 1891.	339 acres excluded at settlement and 709 acres transferred to reserved forest.
		Enadivadi ...	1,567	...	...	1,567	...	...	No. 100 of 11th March 1891.	2 acres excluded at settlement and 1,565 acres transferred to reserved forest.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		CENTRAL CIRCLE—*cont.*								
North Arcot—*cont.*	Arcot—*cont.*	Thandappantangal.	1,112	...	...	1,112	...	...	No. 258 of 11th June 1891.	20 acres excluded at settlement and 1,092 acres transferred to reserved forest.
	Wálajápet ...	Sholavaram ...	1,232	...	...	...	1,232	...	.....	
		Amur	6,020	...	...	...	6,020	...	.....	
		Kolatur	1,779	...	...	...	1,779	...	.....	
		Minnel	1,378	...	...	...	1,378	...	.....	
		Vengunam ...	1,288	...	...	1,288	...	...	No. 194 of 16th April 1891.	Transferred to reserved forest.
		Ponnur	939	...	...	4	935	...	.....	Excluded at settlement.
		Badur	873	...	...	873	...	...	No. 195 of 16th April 1891.	90 acres deducted by rectification of area and 783 acres transferred to reserved forest.
	Wandiwash ...	Nambedu	720	...	...	720	...	..	No. 393 of 27th April 1891.	13 acres excluded at settlement and 707 acres transferred to reserved forest.
		Kodiyalam ...	125	...	...	125	...	...	No. 323 of 17th July 1891.	Transferred to reserved forest.
		Nedungunam ...	1,797	...	...	...	1,797	...	.....	
		Vishamangalam ...	1,148	...	...	1,148	...	...	No. 210 of 27th April 1891.	Transferred to reserved forest.
		Nedungal ...	3,645	...	...	...	3,645	...	.....	
		Lands reserved under Rule 2, section 26 of the Forest Act.								
	Chandragiri ...	Balapalle ...	40,640	...	...	40,640	...	...	.....	Deducted owing to rectification of area.
	Vellore ...	Javadi Hill Block, Arasampet and Naickaneri.	10,240	...	...	...	10,240	...	.....	
	Wallajah ...	Vedantangal ...	64	...	...	...	64	...	.....	
		Balakrishnapuram.	63	...	...	...	63	...	.....	
		Kattupakkam ...	145	...	...	...	145	...	.....	
		Ayal	16	...	...	...	16	...	.....	
		Banavaram ...	35	...	...	...	35	...	.....	
		Head Assistant Collector's office compound, Arkónam.	4	...	...	...	4	...	.....	
		Total ...	334,316	522·37	14,554	93,434	255,436	399·12		
South Arcot.	No. I, Tiruvannámalai.	Valasamalai ...	12,738	...	...	...	12,738	...	.....	
		Tenmalai ...	50,428	...	...	...	50,428	...	.....	
		Pelamaradur ...	9,148	...	...	...	9,148	...	.....	
		Nallapattu ...	6,748	...	...	...	6,748	...	.....	
		Paramanandel ...	1,800	...	...	...	1,800	...	.....	
		Ravandavadi ...	13,333	...	...	...	13,333	...	.....	
		Ponniar	50,000	...	...	...	50,000	...	.....	
		Nattampalle ...	7,333	...	...	...	7,333	...	.....	
		Radapuram ...	7,000	...	...	...	7,000	...	.....	
		Kannamadai ...	7,000	...	...	...	7,000	...	.....	
	No. II, Tindivanam.	Padipallam ...	4,394	...	...	...	4,394	...	.....	
		Pakkam	14,894	...	...	...	14,894	...	.....	
		Kurumpuram, 1st Bit.	556	...	...	56	500	...	.....	Excluded at settlement.
		Naduvandur ...	2,800	...	...	...	2,800	...	.....	

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
South Arcot—*cont.*		Panampattu ...	851	...	...	251	600	...	.....	Excluded at settlement.
		Valudareddi ...	384	...	...	384	...	...	No. 93 of 6th March 1891.	124 acres excluded at settlement and 260 acres transferred to reserved forest.
	No. III, Villupuram.	Kappiyampilyur ..	812	...	...	152	660	...	.....	Excluded at settlement.
		Gangarampalaiyam	512	...	...	77	435	...	.....	Do.
		Melkundai ...	480	...	...	480	...	...	No. 250 of 29th May 1891.	Transferred to reserved forest.
		Sattanur, 2nd Bit.	320	...	...	320	...	...	No. 264 of 11th June 1891.	
		Turinjikadu ...	853	...	...	853	...	...	No. 461 of 17th Oct. 1891.	
		Pulanjimalai ...	853	...	...	253	600	...	.....	Excluded at settlement.
		Tandavasamudram.	2,112	...	...	...	2,112	...	.....	
	No. IV, Cuddalore.	Ramapuram ...	1,868	...	...	138	1,730	...	.....	Excluded at settlement.
		Sillambanadampettai.	780	...	...	780	...	...	No. 261 of 11th June 1891.	Transferred to reserved forest.
		Peramathur ...	1,036	...	...	1,036	...	...	No. 272 of 17th June 1891.	
		Kanjiruppu, 2nd Bit.	2,519	...	...	2,519	...	...	No. 476 of 14th Oct. 1891.	
		Tolankŏda. ...	217	...	...	217	...	...	No. 207 of 27th April 1891.	
		Fort St. David ...	44	...	...	44	...	...	No. 188 of 16th April 1891.	
		Doni Durai ...	192	...	...	...	192	...	.....	
		Nochikadu ...	640	...	...	640	...	...	No. 270 of 17th June 1891.	Transferred to reserved forest.
		Periyakuppam ...	1,683	...	...	...	1,683	...	.....	
		Periyapattu ...	1,145	...	...	15	1,130	...	.....	Excluded at settlement.
	No. IV, Chidambaram.	Killai	1,220	...	...	35	1,185	...	.....	Do.
		Pichavaram ...	2,515	...	...	...	2,515	...	.....	
		Wallajah	2,820	...	...	...	2,820	...	.....	
		Nayanur	2,304	...	...	504	1,800	...	.....	Excluded at settlement.
		Adukkam	2,000	...	...	...	2,000	...	.....	
		Attipakam ...	4,800	...	...	300	4,500	...	.....	Excluded at settlement.
		Samimalai, 1st Bit.	4,641	...	...	...	4,641	...	.....	
		Do. 2nd Bit.	5,580	...	...	250	5,330	...	.....	Excluded at settlement.
		Nattanur, 1st Bit.	4,500	...	...	...	4,500	...	.....	
		Do. 2nd Bit.	3,971	...	...	171	3,800	...	.....	Excluded at settlement.
	No. V, Tirukoilur.	Sidevi	4,243	...	...	1,443	2,800	...	.....	Do.
		Alwarmalai ...	8,950	...	...	...	8,950	...	.....	
		Sirupakam ...	1,228	...	...	148	1,080	...	.....	Excluded at settlement.
		Edakal	3,623	...	...	233	3,390	...	.....	Do.
		Kuttadi	1,700	...	...	1,700	...	...	No. 402 of 12th Sept. 1891.	Transferred to reserved forest.
		Pandur	955	...	...	...	955	...	.....	
		Velur	1,670	...	...	1,670	...	...	No. 324 of 14th July 1891.	Transferred to reserved forest.
		Perichanur ...	928	...	...	278	650	...	.....	Excluded at settlement.

Area of Reserved Lands, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Central Circle—*cont.*									
South Arcot—*cont.*		Takarai	15,400	...	...	...	15,400	...	.....	
	No. VI, Kallakurchi.	Kanai	2,222	...	...	2	2,220	...	.....	Excluded at settlement.
		Pavunjipattu ...	4,500	...	...	..	4,500	...	.....	
		Rangappanur ...	2,560	...	...	360	2,200	...	.....	Excluded at settlement.
		Mallapuram ...	1,025	...	...	...	1,025	...	.....	
		Kanankadu ...	3,520	...	...	...	3,520	...	.....	
		Kottalammalai ...	2,880	...	...	...	2,880	...	.....	
	No. VII, Vriddhachalam.	Kristnapuram ...	6,150	...	...	...	6,150	...	.....	
		Nangur	1,630	...	...	5	1,625	...	.....	Excluded at settlement.
		Veppur	3,970	...	...	...	3,970	...	.....	
		Kottanur	4,100	...	...	...	4,100	...	.....	
		Narasinganur ...	850	...	...	15	835	...	.....	Excluded at settlement.
		Karmangudi ...	1,170	...	...	...	1,170	...	.....	
		Parur	3,000	...	...	340	2,660	...	.....	Excluded at settlement.
		Samakottai ...	6,270	...	...	...	6,270	...	.....	
		Ammeri	1,350	...	...	...	1,350	...	.....	
		Kuppanattam ...	850	...	...	10	840	...	.....	Excluded at settlement.
		Kattumayilur ...	1,600	...	...	10	1,590	...	.....	
		Lands reserved under Rule 2, Section 26 of the Forest Act.								
	No. I, Tiruvannámalai.	Melchengam ...	2,000	...	...	...	2,000	...	.....	
		Pinjur	8,640	...	...	...	8,640	...	.....	
		Munnurmangalam.	4,160	...	...	...	4,160	...	.....	
		Eraiyurmalai ...	7,125	...	...	...	7,125	...	.....	
		Uchimalai ...	3,500	...	...	...	3,500	...	.....	
		Pumalai	3,200	...	...	...	3,200	...	.....	
		Rayandapuram ...	7,000	...	...	...	7,000	...	.....	
		Sennyampettai ...	3,720	...	...	...	3,720	...	.....	
		Kanji	3,040	...	...	...	3,040	...	.....	
		Gangampattu ...	1,920	...	...	...	1,920	...	.....	
		Sorakolattur ...	7,600	...	...	...	7,600	...	.....	
		Devanandal ...	2,000	...	...	...	2,000	...	.....	
		Kodambai	2,000	...	...	...	2,000	...	.....	
		Tachampattu ...	2,300	...	...	...	2,300	...	.....	
	No. IV, Cuddalore.	Siruvattur	212	...	...	...	212	...	.....	
		Ranganadapuram.	620	...	...	...	620	...	.....	
		Puvamkuppam ...	640	...	...	...	640	...	.....	
	No. IV, Chidambaram.	Adivarahanallur ...	1,860	...	...	...	1,860	...	.....	
		Nisingan	800	...	...	...	800	...	.....	
		Rampakkam ...	635	...	...	...	635	...	.....	
		Kondapuram ...	972	...	...	...	972	...	.....	
		Kolakkudi ...	659	...	...	...	659	...	.....	
		Velandai	1,200	...	...	...	1,200	...	.....	
		Sengamedu ...	755	...	...	...	755	...	.....	
		Sittamur	1,510	...	...	...	1,510	...	.....	
		Odiattur	1,696	...	...	...	1,696	...	.....	
		Emappur	340	...	...	...	340	...	.....	
	No. V, Tirukoilúr.	Mambakkam ...	480	...	...	...	480	...	.....	
		Elandurai	307	...	...	...	307	...	.....	
		Tiruvannanallur ...	240	...	...	...	240	...	.....	
		Kalamaradur ...	1,350	...	...	...	1,350	...	.....	
		Kunjaram ...	5,090	...	...	...	5,090	...	.....	
		Pachapalaiyam ...	1,600	...	...	...	1,600	...	.....	
		Kallamedu ...	1,235	...	...	...	1,235	...	.....	
		Rishivendiem ...	5,200	...	...	...	5,200	...	.....	
	No. VI, Kallakurchi.	Sittalur	1,000	...	...	...	1,000	...	.....	
		Porasakurchi ...	950	...	...	...	950	...	.....	
		Varanjaram ...	900	...	...	...	900	...	.....	
		Magarur	1,440	...	...	...	1,440	...	.....	
		Periyanisalur ...	720	...	...	...	720	...	.....	
		Ivadagudi ...	650	...	...	...	650	...	.....	
		Sattiyam ...	416	...	...	...	416	...	.....	
		Vriddhachalam tank.	192	...	...	...	192	...	.....	
	No. VII, Vriddhachalam.	Kannapuram ...	1,800	...	...	...	1,800	...	.....	
		Narimanam ...	640	...	...	...	640	...	.....	
		Periyakurichi ...	360	...	...	...	360	...	.....	
		Velankulam ...	1,390	...	...	...	1,390	...	.....	
		Kattiyanallur ...	960	...	...	...	960	...	.....	
		Total ...	423,192	661·24	...	15,689	407,503	636·72		

Area of Reserved Lands, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		Central Circle—*cont.*								
Tanjore.		Vettangudi ...	1,900	...	...	...	1,900	...	...	
		Elantope ...	18	...	...	18	...	...	No. 531 of 24th Nov. 1891.	1 acre excluded at settlement and 17 acres transferred to reserved forest.
	Northern Range.	Talanthondi ...	100	...	...	...	100	...	...	
		Karpalam ...	54	...	...	...	54	...	...	
		Kadakkavinayaganellur.	90	...	...	...	90	...	...	
		Ambanar, No. I ...	134	...	...	...	134	...	...	
		Do. No. II ...	122	...	...	...	122	...	...	
		Kaliyappanallur ...	20	...	...	...	20	...	...	
		Kodiyakadu Point Calimere.	4,355	...	...	...	4,355	...	...	
		Edangankottai ...	200	...	...	7	193	...	...	Excluded at settlement.
		Perumagalur ...	13	...	...	...	13	...	...	
		Kolakudi	13	...	...	...	13	...	...	
		Muthukurichi ...	10	...	...	...	10	...	...	
		Anaikadu	10	...	...	...	10	...	...	
		Vattagudi ...	10	...	...	...	10	...	...	
		Alattur	10	...	...	...	10	...	...	
		Kannugudi, No. I.	10	...	...	...	10	...	...	
		Do. No. II.	266	...	...	...	266	...	...	
		Pambathukadu ...	203	...	...	...	203	...	...	
		Kathuvani Vakkanathi Reserve.	53	...	...	...	53	...	...	
	Southern Range.	Nannilam ...	2	...	...	...	2	...	...	
		Melakadu ...	331	...	...	...	331	...	...	
		Vendayampatti ...	231	...	...	...	231	...	...	
		Kambayanatham...	65	...	...	...	65	...	...	
		Kurungulam No. I.	100	...	...	...	100	...	...	
		Do. No. II.	141	...	...	...	141	...	...	
		Tholaraputti ...	538	...	...	...	538	...	...	
		Pinganmodu ...	116	...	...	...	116	...	...	
		Vaduvur, No. I...	57	...	...	...	57	...	...	
		Do. No. II...	94	...	...	...	94	...	...	
		Do. No. III...	38	...	...	...	38	...	...	
		Do. No. IV...	133	...	...	...	133	...	...	
		Do. No. V...	124	...	...	...	124	...	...	
		Do. No. VI...	146	...	...	...	146	...	...	
		Do. No. VII...	212	...	...	...	212	...	...	
		Sorapettai ...	70	...	...	...	70	...	...	
		Ullikottai ...	130	...	...	...	130	...	...	
		Total ...	10,119	15·81	...	25	10,094	15·77		
Trichinopoly.	Trichinopoly ...	Ettarai	483	...	...	...	483	...	...	
		Adavatur, No. I ...	370	...	...	...	370	...	...	
		Do. No. II ...	331	...	...	...	331	...	...	
		Velur	382	...	...	...	382	...	...	
		Kotrapatti ...	211	...	...	...	211	...	...	
		Natarajapuram ...	109	...	...	...	109	...	...	
		Alandur	149	...	...	...	149	...	...	
		Adavatur	144	...	...	...	144	...	...	
		Punganur	281	...	...	...	281	...	...	
	Kulitalai ...	Pudur	143	...	...	...	143	...	...	
		Sekkonam... ...	119	...	...	...	119	...	...	
		Mahadanapuram ...	191	...	...	...	191	...	...	
		Pillapalaiyam ...	11	...	...	...	11	...	...	
		Vengampatti ...	103	...	...	...	103	...	...	
		Panjantangi Hill Valley.	262	...	*24	286	...	...	No. 352 of 6th Aug. 1891.	Transferred to reserved forest.
		Karuppar Reddipatti Hill.	4,112	..	...	...	4,112	...	...	
		Sivayam	...	...	108	...	108	...	No. 520 of 13th Nov. 1891.	
		Neidalur	...	...	182	...	182	...		
		Kilamanal Medu ...	...	...	131	...	131	...		

* By rectification of area.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other head. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		CENTRAL CIRCLE—*cont.*								
Trichinopoly—*cont.*	Kulitalai—*cont.*	Nallur and Kallai Pothaikadu.	...	...	179	...	179	...	No. 520 of 13th Nov. 1891.	
		Gudalur Pattuvade Kadu.	...	...	213	...	213	...		
		Summareikadu Pothuravattampatti.	...	...	189	...	189	...		
		Melavaliyur Eastern Block.	...	...	228	...	228	...		
		Melavaliyur Western Block.	...	...	426	...	426	...		
		Padiripatti ...	...	...	413	...	413	...		
		Perumal Pothaikadu (Vadaseri and Kilavaliyur)	...	...	525	...	525	...		
		Chinna Pillur Dharisu.	...	...	176	...	176	...		
		K. Periapatti Kuppanarpattimel Block.	...	...	269	...	269	...		
		Mattaghiri Therku Medu.	...	...	455	...	455	...		
		Tavalavirampatti Vyamalai Kilkadu	...	...	254	...	254	...		
		Tavalavirampatti Karum Kadu.	...	...	293	...	293	...		
		Sokkanathanpatti Pothai (V. Periapatti).	...	...	93	...	93	...		
		Amayapuram Perumaraikadu.	...	...	1,042	...	1,042	...		
		Pannaippatti Perumalpothai.	...	...	478	...	478	...		
		Kombadippatti ...	...	...	240	...	240	...		
	Musiri ...	Omandur	321	...	...	...	321	...	.....	
		Tolayanatham and Kotharapatti.	333	...	...	...	333	...	.....	
		Tirutalaiyur ...	125	...	...	...	125	...	.....	
		Yedumalai ...	959	...	...	...	959	...	.....	
		Vellakalpatti ...	1,224	...	...	...	1,224	...	.....	
		Pulivalam ...	522	...	...	...	522	...	.....	
		Mavalipatti ...	1,010	...	...	...	1,010	...	.....	
		Visalatchiammal Samudram.	138	...	...	...	138	...	.....	
		Manmalai, Kanjurmalai and Uduvampattimalai.	3,000	...	...	...	3,000	...	.....	
		Kanapadi Vunnad.	10,000	...	...	...	10,000	...	.....	
		Kunnam	195	...	...	...	195	...	.....	
		Kottavasel ...	167	...	...	...	167	...	.....	
		Karaipadi	221	...	...	...	221	...	.....	
		Valaiyur Plateau ...	3,000	...	...	...	3,000	...	.....	
		Do. Slope ...	3,480	...	*360	...	3,840	...	.....	
		Udumbiyam ...	500	...	...	...	500	...	.....	
		Periyavenmani ...	138	...	...	...	138	...	.....	
		Tondapadi ...	276	...	...	...	276	...	.....	
		Anukur	487	...	...	...	487	...	.....	
		Malvoy.	264	...	...	...	264	...	.....	
		Nossiyam	152	...	...	...	152	...	.....	
	Perambalur ...	Puduvettakudi ...	113	...	...	...	113	...	.....	
		Kallakudi	123	...	...	...	123	...	.....	
		Attiyur	98	...	...	...	98	...	.....	
		Veppantatti ...	213	...	...	...	213	...	.....	
		Pasumbalur Therkukarai.	149	...	...	...	149	...	.....	
		Pasumbalur Vadakarai.	240	...	...	...	240	...	.....	
		Nunne	175	...	...	...	175	...	.....	
		Kolattur	116	...	...	...	116	...	.....	
		Ogalur	190	...	...	...	190	...	.....	
		Sirukudal	166	...	...	...	166	...	.....	
		Saturbakam ...	352	...	...	...	352	...	.....	
		Kelapuliyur ...	229	...	...	...	229	...	.....	

* Omitted by mistake in previous year's return.

Area of Reserved Lands, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Central Circle—*cont.*									
Trichinopoly—*cont.*	Perambalúr—*cont.*	Neikuppei, No. I	154	...	...	...	154	...	.....	
		Do. No. II.	90	...	...	...	90	...	.....	
		Yesanai	113	...	...	...	113	...	.....	
		Peramattur	658	...	...	...	658	...	.....	
		Mavalingai	260	...	...	...	260	...	.....	
		Pulambadi, No. I.	222	...	...	...	222	...	.....	
		Do. No. II.	645	...	...	...	645	...	.....	
		Do. No. III.	133	...	...	...	133	...	.....	
		Visvakudi	150	...	...	...	150	...	.....	
		Mattavarai	283	...	...	...	283	...	.....	
		Ariyur, No. I	290	...	...	...	290	...	.....	
		Do. No. II	140	...	...	...	140	...	.....	
		Ladapuram	103	...	...	...	103	...	.....	
		Sittalai	404	...	...	...	404	...	.....	
		Sinnavadakarai	268	...	...	...	268	...	.....	
		Nuttapur	175	...	...	...	175	...	.....	
		Makurambalur	269	...	...	...	269	...	.....	
		Sattanavadi	214	...	...	...	214	...	.....	
		Vengalam	361	...	...	...	361	...	.....	
		Kalpadi	300	...	...	...	300	...	.....	
		Venparur	1,024	...	...	...	1,024	...	.....	
		Paravai	150	...	...	...	150	...	.....	
		Nerkunam	1,253	...	...	...	1,253	...	.....	
		Tevaiyur	253	...	...	...	253	...	.....	
		Mettupalaiyam	539	...	...	...	539	...	.....	
		Elambalur	214	...	...	...	214	...	.....	
		Maravattur	261	...	...	...	261	...	.....	
		Kanakasittur	310	...	...	...	310	...	.....	
		Peraiyur	856	...	...	...	856	...	.....	
		Vennarampundi	214	...	...	...	214	...	.....	
		Tiruvalandurai	197	...	...	...	197	...	.....	
		Birmadesam	273	...	...	...	273	...	.....	
		Kurumbalur	366	...	...	...	366	...	.....	
		Numbakurichi, No. I	328	...	...	...	328	...	.....	
		Do. No. II	165	...	...	...	165	...	.....	
		Kilarasur	207	...	...	...	207	...	.....	
		Kilakkarai	119	...	...	...	119	...	.....	
		Yeraiyur and Naduvasal.	562	...	...	...	562	...	.....	
		Naduvasal	176	...	...	...	176	...	.....	
		Sirumattur	499	...	...	...	499	...	.....	
		Jayankondashola-puram, No. I.	150	...	...	150	...	...	No. 369 of 12th Aug. 1891.	Transferred to reserved forest.
		Jayankondashola-puram, No. II.	300	...	...	300	...	...	No. 371 of 12th Aug. 1891.	10 acres excluded at settlement and 290 acres transferred to reserved forest.
		Venanallur	200	...	...	200	...	...	No. 370 of 12th Aug. 1891.	3 acres deducted by rectification of area and 197 acres transferred to reserved forest.
	Udayarpálaiyam.	Kodukkur	100	...	...	100	...	...	No. 368 of 12th Aug. 1891.	8 acres deducted by rectification of area and 92 acres transferred to reserved forest.
		Kanguli	800	...	...	800	...	...	No. 471 of 14th Oct. 1891.	Transferred to reserved forest.
		Ayyur	1,400	...	...	1,400	...	...	No. 452 of 14th Oct. 1891.	Do.
		Tirukonam	650	...	...	650	...	...	No. 473 of 14th Oct. 1891.	Do.
		Pasikulam	100	...	...	100	...	...	No. 103 of 10th March 1891.	Do.
		Sittidaiyar	54	...	...	54	...	...	No. 101 of 12th March 1891.	1 acre deducted by rectification of area and 53 acres transferred to reserved forest.

Area of Reserved Lands, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Trichinopoly—*cont.*	Udayarpalaiyam—*cont.*	Kulumur	200	..	..	200	...	...	No. 475 of 14th Oct. 1891.	Transferred to reserved forest.
		Periyakurichi ...	150	...	...	150	...	...	No. 105 of 12th March 1891.	3 acres deducted by rectification of area and 147 acres transferred to reserved forest.
		Sattambadi ...	1,000	...	...	1,000	...	...	No. 106 of 12th March 1891.	Transferred to reserved forest.
		Alavayi	300	...	...	300	...	...	No. 123 of 21st March 1891.	Do.
		Ambappur ...	200	...	...	200	...	...	No. 121 of 21st March 1891.	Do.
		Ulliyakudi ...	200	...	...	200	...	...	No. 122 of 21st March 1891.	4 acres excluded at settlement and 196 acres transferred to reserved forest.
		Sundreswarapuram	150	...	...	150	...	...	No. 118 of 18th March 1891.	Transferred to reserved forest.
		Periyavalaiyam ...	1,000	...	...	1,000	...	...	No. 290 of 22nd June 1891.	15 acres excluded at settlement and 985 acres transferred to reserved forest.
		Vettiyarpattu, Nos. I and II.	650	...	...	650	...	...	Nos. 90 and 91 of 6th March 1891.	18 acres excluded by rectification of area, 12 at settlement and 620 transferred to reserved forest.
		Kovilur	700	...	...	700	...	..	No. 469 of 14th Oct. 1891.	Transferred to reserved forest.
		Mudukkalam ...	1,200	...	..	1,200	...	...	No. 287 of 22nd June 1891.	3 acres deducted by rectification of area and 1,197 acres transferred to reserved forest.
		Velangudi ...	900	...	...	900	...	...	No. 291 of 22nd June 1891.	Transferred to reserved forest.
		Kolamanikkam ...	242	...	...	242	...	..	No. 89 of 6th March 1891.	6 acres excluded at settlement and 236 acres transferred to reserved forest.
		Araimanaikkurichi.	91	...	...	91	...	...	No. 92 of 6th March 1891.	Transferred to reserved forest.
		Karaipakkam	83	...	...	...	83	...	.....	
		Tiruvenganur, Nos. I to V.	136	...	...	...	136	...	.....	
		Varappanakkurichi, Nos. I to VI.	190	...	...	190	...	...	No. 459 of 15th Oct. 1891.	Transferred to reserved forest.
		Sattambadi, Nos. I to XI.	179	...	...	...	179	...	.....	
		Sripurandan, Nos. I and II.	434	...	* 23	457	..	...	No. 467 of 14th Oct. 1891.	Transferred to reserved forest.
		Annangarapettai ...	58	...	...	58	...	...	No. 170 of 13th April 1891.	1 acre excluded at settlement and 57 acres transferred to reserved forest.
		Total ...	61,092	95·45	6,301	11,728	55,665	86·98		
Salem.	Atur	Pattimedu ...	3,046	...	...	...	3,046	...	.....	
		Nagalur	6,138	...	...	...	6,138	...	.....	
		Thumbal	3,680	...	...	...	3,680	...	.....	
		Mahnur	4,000	...	...	...	4,000	...	.....	
		Pattimedu Extension.	1,200	...	...	...	1,200	...	.....	
		Thumbal do.	4,800	...	...	...	4,800	...	.....	

* By rectification of area.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		CENTRAL CIRCLE—*cont.*								
Salem—*cont.*	Atur—*cont.*	Jadayagoúnden Slope.	11,220	...	...	...	11,220	...	.....	
		Gangavalle ...	7,040	...	...	...	7,040	...	.....	
		Varagur extension.	500	...	...	...	500	...	.....	
		Pillapadi	4,992	...	...	4,992	...	...	No. 373 of 14th Aug. 1891.	Transferred to reserved forest.
		Kurumbapatti extension.	10,000	...	...	...	10,000	...	.....	
		Vanavasi	9,000	...	...	9,000	...	...	No. 186 of 16th April 1891.	Transferred reserved forest.
	Salem ...	Ramaswami Malai.	3,000	...	...	...	3,000	...	.....	
		Arasankad ...	2,500	...	..	...	2,500	...	.....	
		Kaputu	3,500	...	...	...	3,500	...	.....	
		Pudupatti ...	7,500	...	...	..	7,500	...	.....	
		Nagaramalai ...	1,280	...	...	...	1,280	...	.....	
		Saniyasimalai ...	600	...	...	...	600	...	.....	
		Yelattur	2,000	...	..	...	2,000	..	.....	
		Kudimaduvu ...	4,307	...	...	...	4,307	...	.....	
	Uttankarai ..	Ammapalayam ...	9,216	...	...	9,216	...	...	No. 325 of 14th July 1891.	Transferred to reserved forest.
		Konramalai extension.	4,000	...	...	...	4,000	...	.....	
		Mukanur	8,000	...	...	...	8,000	...	.. ...	
		Thombakal extension.	3,840	...	...	...	3,840	...	.....	
		Nochikuttai ...	7,917	...	...	...	7,917	...	.....	
		Kalnad	4,320	...	...	...	4,320	...	.....	
		Chitteri extension.	2,880	...	...	...	2,880	...	.....	
		Veppambatti ...	8,640	...	...	...	8,640	...	.....	
		Thirthamalai ...	11,046	...	...	...	11,046	...	.....	
		Vellakuttai ...	1,152	...	...	...	1,152	...	.....	
	Tirupatur ...	Inner Javadi Block.	...	...	32,000	...	32,000	...	No. 367 of 8th Aug. 1891.	
		Andiappanur New Reserve.	...	...	7,500	...	7,500	...	No. 367 of 8th Aug. 1891.	
	Uttankarai and Tirupatur.	Govindapuram ...	2,700	...	...	...	2,700	...	.....	
	Tirupatur and Krishnagiri.	Nandibanda ...	2,500	...	...	...	2,500	...	.....	
	Hosur ...	Galigattam ...	6,080	...	...	...	6,080	...	.....	
		Kestur extension ...	3,600	...	...	...	3,600	...	.....	
		Thalli extension ...	4,320	...	...	...	4,320	...	.....	
	Dharmapuri...	Kesaraguli ...	6,400	...	...	...	6,400	...	.....	
		Picklymalai ..	6,400	...	...	...	6,400	...	.....	
		Masakallu ...	9,600	...	...	9,600	...	...	No. 468 of 14th Oct. 1891.	Transferred to reserved forest.
		Bathanavadi ...	27,000	...	...	...	27,000	...	.....	
		Perumbalai Malai.	12,000	...	...	12,000	...	...	No. 171 of 13th April 1891.	Transferred to reserved forest.
		Kelapambadi ...	9,500	..	...	..	9,500	...	.....	
		Thoppur	7,000	..	...	...	7,000	...	.....	
	Krishnagiri ...	Maharajgudai ...	10,304	...	...	...	10,304	...	.....	
		Neralkota ...	7,040	...	...	...	7,040	...	.....	
		Maharajgudai extension.	2,560	...	...	...	2,560	...	.....	
		Varatanapalli ...	2,216	...	...	...	2,216	...	.....	
		Thattakal ...	857	...	...	...	857	...	.....	
	Tiruchengod ...	Suriyamalai ...	5,000	...	...	5,000	...	...	No. 223 of 2nd May 1891.	350 acres excluded at settlement and 4,650 acres transferred to reserved forest.
		Lands reserved under Rule 2, Section 26 of the Forest Act.								
	Uttankarai ...	Karangal	4,320	...	...	...	4,320	...	.....	
		Uttenkarai, New ...	3,200	...	...	...	3,200	...	.....	
		Wonnagiri... ...	2,944	...	...	...	2,944	...	.....	
		Kallavi	4,160	...	...	...	4,160	...	.....	
		Poyyapatti ...	3,488	...	...	.	3,488	...	.. ...	
		Morappur ...	4,000	...	...	...	4,000	...	.....	

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Central Circle—*cont.*			*Lands reserved under Rule 2, Section 26 of the Forest Act—cont.*							
Salem—*cont.*	Uttankarai—*cont.*	Harur, New ...	1,901	...	...	..	1,901	...	.....	
		Kaladipatti ...	2,912	...	...	..	2,912	...	.....	
		Thenkaraikota ...	2,368	...	...	...	2,368	...	.....	
		Kouramalai ...	8,512	...	...	...	8,512	...	.....	
	Tirupatur ...	Kothanur ...	7,257	...	...	7,257	...	...	No. 367 of 8th Aug. 1891.	These have been notified under sec. 4 under one name, *e.g.* "Inner Javadi."
		Garagamandi ...	1,280	...	..	1,280				
		Madagathur ...	3,200	...	...	3,200				
		Inner Javadi ...	...	...	20,263	20,263				
		Andiappanur ...	4,704	..	2,796	7,500	...	...	Do.	
	Hosur ...	Hulibanda ...	7,360	...	...	...	7,360	...	.....	
		Pani	5,856	...	...	...	5,856	...	.....	
		Kundukotta ...	4,768	...	...	...	4,768	...	.....	
		Sivanhalli ...	4,992	...	...	...	4,992	...	.....	
	Salem ...	Velampatti ...	3,500	...	..	...	3,500	...	.....	
		Kurichi	2,300	...	...	...	2,300	...	.....	
		Mallur	5,000	...	...	...	5,000	...	.....	
		Total ...	364,413	569·40	62,559	89,308	337,664	527·6		
		Total of the Circle.	2,566,540	4,010·22	95,443	324,086	23,37,897	3,652·96		
Southern Circle.										
Madura.	I. Cumbum ...	Kombai ...	3,840	...	...	...	3,840	...	.....	
		No. I, Vellaikaradu	965	...	...	* 325	640	...	.....	
		No. II, Sonaikaradu.	182	...	...	...	182	...	.....	
		No. III, Mottaikaradu.	193	...	* 127	...	320	...	.....	
		No. IV, Kuttaikaradu.	125	...	...	...	125	...	.....	
		No. V, Nagarmalaikaradu.	118	...	...	...	118	...	.....	
		No. VI, Perumalkovilkaradu.	573	...	* 67	...	640	...	.....	
		No. VII, Sanyasikovilkaradu.	283	...	..	...	283	...	.....	
		Nallatevanpatti ...	1,920	...	...	...	1,920	...	.....	
		Murugamalai ...	5,760	...	* 812	6,572	...	...	No. 389 of 1st Sept. 1891.	Transferred to reserved forest.
		The southern slopes of the Palni Hills.	22,400	...	* 3,200	25,600	....	...	No. 147 of 7th April 1891.	Do.
		Certain lands on the Lower Palni Hills lying outside the limits of certain cultivated lands and cultivable waste.	1,920	...	...	...	1,920	...	.....	
	II. Palni Hill.	Manjakaraiar ...	1,600	...	* 3,225	...	50	...	.....	
		Vanjankanal ...					15	...	.....	
		Alayadikanal ...					2,080	...	.....	
		Chikadikanal ...					20	...	.....	
		Koviladikanal ...					224	...	.....	
		Kumalarakadu ...					160	...	.....	
		Talakodikadu ...					25	...	.....	
		Tinnikutukadu ...					1,600	...	.....	
		Poliyapattimalai ...					50	...	.....	
		Periyasholakadu ...					448	...	.....	
		Elamalai ...								
		Nedumbaraikadu.					19	...	.....	
		Ponyettukanal ...					134	...	.....	
	III. Kanavoipatti.	Karandamalais ...	19,200	...	* 2,877	22,077	...	...	No. 453 of 15th Oct. 1891.	Transferred to reserved Forest.
		Panjantangi Hills.	3,200	...	* 4,223	7,423	...	...	No. 463 of 14th Oct. 1891.	
	IV. Palamedu ...	Waguthumalai ...	3,840	...	* 2,249	6,089	...	...	No. 135 of 3rd April 1891.	

* By rectification of area.

Area of Reserved Lands, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Southern Circle—*cont.*									
Madura—*cont.*	IV. Palamedu—*cont.*	Kachchaikatti ...	1,600	...	*145	1,745	...	...	No. 136 of 3rd April 1891.	Transferred to reserved forest.
		Kiluvamalai ...	1,920	...	...	...	1,920	...	.....	
		Tiruparangundram	960	...	...	...	960	...	.....	
		Elephant Rock ...	640	...	...	...	640	...	.....	
		Ammanamalai ...								
		Mutupattimalai ...	1,600	...	...	...	1,600	...	.....	
		Vandiyoor Rock ...								
		Total ...	72,839	113·81	16,925	69,831	19,933	31·14		
Tinnevelly.	Tenkási ...	Block III (*a*), (*b*), (*c*), (*d*).	10,643	...	...	10,643	...	...	No. 178 of 13th April 1891.	Transferred to reserved forest.
	Sankaranainarkoil.	Block IV (*a*) ...	30,714	...	...	30,714	...	...	No. 176 of 13th April 1891.	Do.
		Sayamalai ...	294	...	...	294	...	...	No. 355 of 1st Aug. 1891.	Do.
	Srivilliputtur ...	Block V (*a*) ...	40,006	...	...	40,006	...	...	No. 175 of 13th April 1891.	132 acres excluded at settlement and 39,874 acres transferred to reserved forest.
		Valaikulam parambu.	1,120	...	...	1,120	...	...	No. 335 of 23rd July 1891.	Transferred to reserved forest.
	Tinnevelly ...	Thalaiyuthu ...	890	...	...	890	...	...	No. 150 of 7th April 1891.	Do.
		Sivalaperi ...	263	...	...	263	...	...	No. 149 of 7th April 1891.	Excluded 50 acres by rectification of area and transferred 213 acres to reserved forest.
	Tenkarai ...	Kudiraimalai ...	13,393	...	...	..	13,393	...	.....	
		Vallanad Hills ...	4,666	...	...	4,666	...	...	No. 465 of 14th Oct. 1891.	Transferred to reserved forest.
	Otapidáram ...	Milavittan ...	709	...	...	709	...	...	No. 271 of 17th June 1891.	Do.
		Vaippar	813	...	...	...	813	...	.....	
		Total ...	103,511	161·74	...	89,305	14,206	22·19		
North Coimbatore.	Satyamangalam.	Talamalai ...	121,600	...	...	121,600	...	...	No. 435 of 5th Oct. 1891.	Transferred to reserved forest.
		Gutialatur ...	179,200	...	...	...	179,200	...	.....	
	Kollegál ...	Chickialur ...	53,760	...	...	53,760	...	...	No. 257 of 11th June 1891.	Transferred to reserved forest.
		Doddasampagai ...	65,920	...	...	65,920	...	...	No. 13 of 19th Dec. 1891.	5,120 acres excluded at settlement and 60,800 acres transferred to reserved forest.
		Yedaralli and Ponnachi.	476,160	...	...	...	476,160	...	.....	
	Bhavání ...	Palamalai ...	28,160	...	...	...	28,160	...	.....	
		Burgur, North and South	215,040	...	...	...	†191,360 / 23,680	...	Nos. 211 and 212 of 27th April 1891.	
	Erode ...	.....	27,927	...	...	...	27,927	...	.....	
	Karúr ...	Karavalli	3,549	...	...	‡381	65		No. 192 of 16th April 1891.	
		Thalaithupatti ...					59			
		Molaipalaiyam ...					143			
		Thottiyavadi ...					193			
		Thalapatti ...					168			
		Punjaikalakurichi.					81			
		Modukkur ...					118			
		Inanganur ...					212	...		

* Added by rectification of area. † Notified under section 4. ‡ By revised estimate.

Area of Reserved Lands, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		Southern Circle—*cont.*								
North Coimbatore—*cont.*	Karúr—*cont.*	Komarapalaiyam...	3,549	...	...	* 381	112	...	No. 192 of 16th April 1891.	
		Vandalmalai and Ranganmalai.					1,708	...		
		Kakkavadi Pichampatti.					179	...		
		Nerur					131	...		
	Dhárápuram ...	Maravapalaiyam ...	...	...	84	...	84	...		
		Sivamalai ...	...	...	100	...	100	...		
		Nadukandamedu ...	...	...	218	...	218	...		
		Uthyur	...	...	1,024	...	1,024	...		
		Pullakalipalaiyam.	...	...	66	...	66	...		
		Settipalaiyam ...	...	...	95	...	95	...		
		Ganapathipalaiyam.	...	...	80	...	80	...		
		Pamapuram, 1st Bit.	...	...	272	...	272	...		
		Pamapuram, 2nd Bit.	...	...	179	...	179	...		
		Kangayampalaiyam.	...	...	177	...	177	...		
		Selambampalaiyam.	...	...	177	...	177	...		
		Ganapathy ...	...	...	432	...	432	...		
		Thalavaipatnam ...	...	...	434	...	434	...		
		Sennakalpalaiyam, 1st Bit.	...	...	103	...	103	...		
		Sennakalpalaiyam, 2nd Bit.	...	...	101	...	101	...		
		Pulikalkarudu ...	...	...	409	...	409	...	No. 191 of 16th April 1891.	
		Undarapatty, 1st Bit.	...	...	117	...	117	...		
		Undarapatty, 2nd Bit.	...	...	148	...	148	...		
		Manakadarur ...	...	...	323	...	323	...		
		Puthur	...	...	70	...	70	...		
		Kullakalipalaiyam.	...	...	89	...	89	...		
		Akharapalaiyam, 1st Bit.	...	...	64	...	64	...		
		Akharapalaiyam, 2nd Bit.	...	...	87	...	87	...		
		Thattanmedu ...	...	...	80	...	80	...		
		Manjampatti ...	...	...	203	...	203	...		
		Yethelamalai ...	...	...	64	...	64	...		
		Attamalai	...	...	646	...	646	...		
		Periamanimalai ...	...	...	963	...	963	...		
		Semmadaiparai ...	...	...	250	...	250	...		
		Mammedu ...	...	...	183	...	183	...		
		Iyempalaiyam ...	...	...	116	...	116	...		
		Punnakkal ...	...	...	563	...	563	...		
		Pulamvalasu ...	...	...	187	...	187	...		
		Kannimarcoil ...	...	...	84	...	84	...		
		Punjaithalaiyur ...	...	...	58	...	58	...		
		Vellakoil	...	...	55	...	55	...		
		Total ...	1,171,316	1830·18	8,301	24,1661	937,956	1465·55		
South Coimbatore.	Palladam ...	Alatur	237	...	...	...	237	...	.....	
		Ammapalayam ...	119	...	...	...	119	...	.....	
		Arasur	94	...	...	...	94	...	.....	
		Asanellipalayam ...	160	...	...	...	160	...	.....	
		Avanáshi	55	...	...	...	55	...	.....	
		Ichipatti	639	...	...	...	639	...	.....	
		Iduvai	94	...	...	...	94	...	.....	
		Ittivirampalaiyam.	581	...	...	...	581	...	.....	
		Kadirampalaiyam.	185	...	...	...	185	...	.....	
		Kaduvettipálaiyam.	80	...	...	...	80	...	.....	
		Kalipalaiyam ...	123	...	...	...	123	...	.....	
		Kandampalaiyam.	92	...	...	...	92	...	.....	
		Kaniyampalayam.	156	...	...	...	156	...	.....	
		Kaniyur	813	...	...	...	813	...	.....	
		Karadibavi ...	50	...	...	...	50	...	.....	

* By revised estimate.

Area of Reserved Lands, 1891–92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Southern Circle—*cont.*										
South Coimbatore —*cont.*	Palladam—*cont.*	Karaipudur ...	92	...	...	...	92	...	.....	
		Karavalur ...	522	...	...	...	522	...	.....	
		Kurumbapalayam.	299	...	...	...	299	...	.....	
		Karumattampatti.	292	...	...	...	292	...	.....	
		Kodanjipalayam ...	121	...	...	...	121	...	.....	
		Kuppandapalayam.	69	...	...	...	69	...	.....	
		Kuttagam ...	582	....	...	...	582	...	.....	
		Mangarasuvalai-yampalayam.	271	...	...	...	271	...	.....	
		Moparipalayam ...	163	...	...	...	163	...	.....	
		Naranapuram ...	556	...	...	...	556	...	.....	
		Narayampalli ...	51	...	...	...	51	...	.....	
		Nilambur	113	...	...	...	113	...	.....	
		Papakulam ...	103	...	...	...	103	...	.....	
		Paruvai	76	...	...	...	76	...	.....	
		Pattampalaiyam ...	79	...	...	...	79	...	.....	
		Perumanallur ...	159	...	...	...	159	...	.....	
		Perunkarunaipalayam.	53	...	...	...	53	...	.....	
		Pudupalaiyam ...	793	...	...	...	793	...	.....	
		Pulippar	72	...	...	...	72	...	.....	
		Puluvapatti ...	111	...	...	...	111	...	.....	
		Pumalur	291	...	...	...	291	...	.....	
		Rakkiyapalayam ...	278	...	...	...	278	...	.....	
		Samalapuram ...	52	...	...	...	52	...	.....	
		Settipalaiyam ...	159	...	...	...	159	...	.....	
		Senneripalayam ...	75	...	...	...	75	...	.....	
		Sokkanur	132	...	...	...	132	...	.....	
		Sokkampalayam ...	479	...	...	...	479	...	.....	
		Tandakarampalayam.	83	...	...	...	83	...	.....	
		Tattanur	289	...	...	...	289	...	.....	
		Tekkalur	389	...	...	...	389	...	.....	
		Taranallur ...	82	...	...	...	82	...	.....	
		Tulukamuttur ...	60	...	...	...	60	...	.....	
		Uppilipalayam ...	99	...	...	...	99	...	.....	
		Vadugapalayam ...	57	...	...	...	57	...	.....	
		Do. ...	293	...	...	...	293	...	.....	
		Vallipuram ...	52	...	...	...	52	...	.....	
		Velampalayam ...	81	...	...	...	81	...	.....	
		Do. ...	75	...	...	...	75	...	.....	
		Virapandi	175	...	...	...	175	...	.....	
		Total ...	11,256	17·59	...	...	11,256	17·59		
Nilgiris.	Sigur	Sigur	41,127	..	...	...	41,127	...	.....	
		Fern Hill Shola ...	10	...	...	10	....	...	No. 253 of 29th May 1891.	Transferred to reserved forest.
		Addition to Fairlawn's Block No. I.	22	...	...	22	...	...		
		Addition to Dodabetta Block No. II.	12	..	* 1	13	...	...		
		Addition to Doddahalla.	10	...	...	10	...	...		
		Bilikal road ...	25	...	...	25	...	...		
	Ootacamund...	Nanjanad ...	888	...	...	...	888	...	.....	
		Red Hills ...	50	...	...	* 2	48	...	.....	
		Keradamund ...	276	...	...	...	276	...	.....	
		Bigulihalla ...	46	...	...	...	46	...	.....	
		Yadakad	117	...	...	...	117	...	.....	
		Welbeck ...	66	...	...	† 66	...	...	No. 486 of 26th Oct. 1891.	
		Nanjanad addition No. I.	...	...	9	...	9	...	No. 76 of 23rd Feb. 1892.	
		Nanjanad addition No. II.	...	...	8	...	8	...		
		Nanjanad addition No. III.	...	...	10	...	10	...		
	Coonoor ...	Honnathalai (South).	218	...	...	* 4	214	...	.....	
		Bettumund ...	137	...	...	137	...	...	No. 193 of 16th April 1891.	Transferred to reserved forest.

* By rectification of area. † Struck off the list.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Southern Circle—*cont.*									
Nilgiris—*cont.*	Coonoor—*cont.*	Rallia	385	...	...	*3	382	...		
		Little Rallia ...	29	...	...	29	...	...	No. 193 of 16th April 1891.	Transferred to reserved forest.
		Rallia Shola ...	30	...	...	30	...	...		
		Halakaray ...	172	...	...	172	...	...		
		Teppakuchi ...	119	...	...	*4	115	...		
		Billithittu	35	...	...	35	...	...	Do.	
		Dolphin	65	...	...	65	...	...		
		Guernsey	14	...	...	14	...	...		
		Kodamalai ...	15	...	...	15	...	...		
		Naduhatti ...	476	...	...	...	476	...	.....	
		St. Catherine's Fall.	124	...	...	124	...	...	No. 206 of 27th April 1891.	Transferred to reserved forest.
		Constantia ...	35	...	...	35	...	...		
		Tuttapolliam ...	54	...	...	54	...	...		
		Gudakalhalla ...	299	...	...	299	...	...		
		Bettu, Nos. I and II	29	...	...	29	...	...		
		Kunnavara addition.	97	...	*1	98	...	...		
		Kanavatti ...	16	...	...	16	...	...		
		Deepdale	361	...	...	361	...	...		
		Gudakal	600	...	...	600	...	...	No. 512 of 14th Oct. 1891.	Do.
		Clyffe	33	...	...	33	...	...		
		Yercaudhalla ...	20	...	...	*2	18	...	.....	
		Konakarai Slopes.	1,864	...	...	...	1,864	...	.....	
		Dodabetta ...	105	...	...	105	...	...	No. 512 of 14th Oct. 1891.	Transferred to reserved forest.
		Shamrock	43	...	...	43	...	...		
		Bikkehatti ...	19	...	...	19	...	...		
		Ittakal, Nos. 1 and 2.	21	...	...	21	...	...		
		Mavada	211	...	...	211	...	...		
		Kuttada, Nos. 1 and 2.	29	...	...	29	...	...		
		Vagapanai ...	2,648	...	...	...	2,648	...	...	
		Denad	2,073	...	...	...	2,073	...	.....	
		Sundatti	124	...	...	124	...	...	No. 512 of 14th Oct. 1891.	Transferred to reserved forest.
		Kunshola	159	...	...	159	...	...		
		Kirkanara, Nos. 1 and 2.	24	...	...	24	...	...		
		Kellatti	17	...	...	17	...	...		
		Hadumund ...	48	...	...	48	...	...		
		Uppatti	53	...	...	53	...	...		
		Doddakavu ...	62	...	...	62	...	...		
		Ullavanad mund Shola.	57	...	...	57	...	...		
		Sinnattu Shola ...	51	...	...	51	...	...		
		Madanad	723	...	...	...	723	...	.....	
		Kodanad Valley ...	294	...	...	...	294	...	.. ...	
		Nedugula	89	...	...	...	89	...	.....	
		Longwood addition.	31	...	...	31	...	...	No. 193 of 16th April 1891.	Transferred to reserved forest.
		Kullar additions I and II.	72	...	...	72	...	...	No. 193 of 16th April 1891 and 206 of 27th April 1891.	
		Benhope, No. 2 ...	34	...	...	34	...	...	No. 206 of 29th April 1891.	
		Jakanare Slopes ...	6,419	...	...	...	6,419	...	.....	
		Kallur	388	...	...	388	...	...	No. 206 of 29th April 1891.	Transferred to reserved forest.
		Pillur Slopes ...	2,332	...	...	...	2,332	...		
		Pakasuramalai ...	625	...	...	...	625	...		
		Pillur Shola ...	39	...	...	..	39	...		
		Kulear	226	...	..	...	226	...		
		Sutton Shola addition.	36	...	*2	...	38	...		
		Kolokombe ...	830	...	...	...	830	...		
		Taimalai Shola ...	43	...	*7	...	50	...		
		Tudur Shola ...	24	...	...	...	24	...		
		Melur Slopes ...	4,429	...	...	...	4,429	...		
		Osatti	152	...	...	..	152	...		
		Koderu	21	...	...	...	21	...		
		Kilur	9	...	...	...	9	...		

* By rectification of area.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		SOUTHERN CIRCLE—*cont.*								
Nilgiris—*cont.*	Coonoor—*cont.*	Raliah Reserve addition.	...	...	3	...	3	...	No. 80 of 23rd Feb. 1892.	
		Commandu Reserve addition.	...	...	32	...	32	...	No. 232 of 20th May 1891.	
		Teppakuchi Reserve addition.	...	...	4	...	4	...	No. 470 of 14th Oct. 1891.	
		Pillur Slopes Reserve addition.	..	...	896	...	896	....	No. 498 of 26th Oct. 1891.	
	Mudumalai ...	Mudumalai ...	46,639	...	...	...	46,639	...	.....	Leased forests.
		Total ...	117,075	182·93	973	3,855	114,193	178·43		
North Malabar.	Wynaad ...	Palepattur ...	746	...	...	...	746	...	.....	
		Vengur	5,470	...		...	5,470	...	.....	
		Chedlet	517	..	...	...	517	...	.....	
		Karpur	753	...	...	..	753	..	.....	
		Kalur	213	..	...	...	213	..	.....	
		Kudrakote ...	21,502	...	...	....	21,502	...	.....	
		Padri	30,468	...	...	...	30,468	...	.....	
		Cardamom Forest.	13,683	...	...	....	13,683	...	.....	
		Kanot	25,600	...	...	...	25,600	...	.....	
		Chapparam ...	112	...	...	...	112	...	.....	
		Panniyatta ...	150	...	...	...	150	...	.....	
		Total ...	99,214	155·02	...	...	99,214	155·02		
South Malabar.	Nilambúr ...	Nilambur Block ...	5,036	...	* 165	..	5,201	...	.....	
		Pokote	761	...	...	...	761	...	.....	
		Panang d	859	...	* 46	...	905	...	.....	
		Valluvasheri ...	914	...	* 18	...	932	...	.....	
		Kanakut	669	...	...	...	669	..	.....	
		Erambadam ..	581.	...	...	...	581	...	.....	Leased forests.
		Ambelakandi ...	1	..	...	...	1	...	.....	
		Arimbrahutamala.	322	...	...	...	322	...	.....	
		Mangalasheripa-ramba.	11	...	...	...	11	...	.....	
		Puttalatta and Chittarikkal paramba.	8	...	...	...	8	..	.....	
		The Silent Valley.	17,280	...	...	...	17,280	...	.....	
	Amarampalam.	Muriat	1,765	...	...	...	1,765	...	.....	Leased forests.
		Karian	1,002.	..	...	† 51	951	...	.....	
		The New Amarampalam Forest.	96,000	...	...	...	96,000	...	.....	
	Pálghat ...	Chathamkulam-karai paramba.	30	...	‡ 11	...	41	...	.....	
		Thamburattapottai *alias* Pilacheri Pallam.	100	..	‡ 37	...	137	..	.....	
		Tiruvashamkannu *alias* Panakadam.	1,000	...	...	...	1,000	...	.....	
	Waluvanádi ..	Block, No. II ...	24,320	...	...	...	24,320	...	.....	
		Do. III(*a*) ...	12,800	...	...	...	12,800	...	.....	
		Block Nos. III (*b*), I and III (*b*), II.	4,480	...	...	...	4,480	...	.....	
		Block Nos. IV (*a*), IV (*b*) and IV (*c*).	16,640	...	...	...	16,640	...	.....	
		Total ...	184,579	288·40	277	51	184,805	288·76		
South Canara.	Coondapoor ...	Harkur Block ...	858	...	...	..	858	...	.....	
		Kasanakatte ...	262	...	...	...	262	...	.....	
		Talaburane ...	640	...	...	‡ 29	611	...	.....	
		Gundaberpare ...	3,200	...	..	‡ 1,022	2,178	....	.....	
		Jennalane	1,280	...	...	‡ 623	657	...	.....	
		Korakoppadahola.	640	...	...	‡ 207	433	...	.....	
	Udipi ...	Tenkahola ...	2,039	...	...	2,039	...	...	No. 179 of 13th April 1891.	Transferred to reserved forest.
	Mangalore ...	Muju Malai ...	3,200	...	...	3,200	...	...	No. 177 of 13th April 1891.	Do.

* Omitted in previous year's return by mistake. † Included in previous year's return by mistake.
‡ By rectification of area.

Area of Reserved Lands, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
South Canara—*cont.*	Southern Circle—*cont.*									
	Uppinangadi	Dharmastal Mundoji.	9,600	...	...	..	9,600	...	.....	
	Uppinangadi	Charmadi Kanapadi.	12,800	..	...	...	12,800	..	.....	
	Kásaragód ...	Parappa	7,680	..	...	*5,120	2,560	...	.....	
			Lands reserved under Rule 2, section 26 of the Forest Act.							
	Coondapoor ..	.....	137,120	..	* 1,882	...	139,002	...	.....	
	Udipi ...	.....	73,443	...	...	...	73,443	...	.....	
	Mangalore ...	.....	27,693	...	...	...	27,693	...	.....	
	Uppinangadi	.....	288,000	.	...	...	288,000	...	.....	
	Kásaragód ...	.....	32,920		* 5,120	...	38,040	...	.....	
		Total ..	601,375	939·65	7,002	12,240	596,137	931·47		
		Total of the Circle.	2,361,165	3,689·32	33,478	416,942	1,977,700	3,090·15		
		Grand Total of the three Circles.	7,318,097	11,434·52	286,581	1,586,133	6,018,545	9,403·97		

* By rectification of area.

ABSTRACT

District.	AREA ON 1ST APRIL 1891.		ADDED DURING THE YEAR.	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 31ST MARCH 1892.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
NORTHERN CIRCLE.						
Ganjam	296,480	463·25	1,847	18,320	280,007	437·51
Vizagapatam	6,500	10·16	46,997	992	52,505	82·04
Godávari	454,240	709·75	2,160	73,520	382,880	598·25
Kistna	218,120	340·81	1,580	81,734	137,966	215·57
Anantapur	168,380	263·09	43,936	5,567	206,749	323·05
Bellary	195,437	305·37	25,400	23,201	197,636	308·81
Kurnool	1,051,235	1,642·55	35,740	641,770	445,205	695·63
Total ..	2,390,392	3,734·98	157,660	845,104	1,702,948	2,660·86
CENTRAL CIRCLE.						
Nellore	273,145	426·79	438	63,774	209,809	327·83
Cuddapah	1,064,006	1,662·51	4,054	37,497	1,030,563	1,610·25
Chingleput	36,257	56·65	7,537	12,631	31,163	48·69
North Arcot	334,316	522·37	14,554	93,434	255,436	399·12
South Arcot	423,192	661·24	...	15,689	407,503	636·72
Tanjore	10,119	15·81	...	25	10,094	15·77
Trichinopoly	61,092	95·45	6,301	11,728	55,665	86·98
Salem	364,413	569·40	62,559	89,308	337,664	527·6
Total ...	2,566,540	4,010·22	95,443	324,086	2,337,897	3,652·96
SOUTHERN CIRCLE.						
Madura	72,839	113·81	16,925	69,831	19,933	31·14
Tinnevelly	103,511	161·74	...	89,305	14,206	22·19
North Coimbatore	1,171,316	1,830·18	8,301	241,661	937,956	1,465·55
South Coimbatore	11,256	17·59	...		11,256	17·59
Nilgiris	117,075	182·93	973	3,855	114,193	178·43
North Malabar	99,214	155·02	...	...	99,214	155·02
South Malabar	184,579	288·40	277	51	184,805	288·76
South Canara	601.375	939·65	7,002	12,240	596,137	931·47
Total ...	2,361,165	3,689·32	33,478	416,943	1,977,700	3,090·15
Grand Total ...	7,318,097	11,434·52	286,581	1,586,133	6,018,545	9,403·97

Annual Form No. 59-C.

Forest Department, Madras Presidency.

Area of other Forests, 1891-92.

District.	Range.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Northern Circle.									
Vizagapatam.	Pálkonda (Agency) ...	...	14,600	22·81	...	14,000	600	·94	...	Transferred to reserved lands.
	Central Circle.									
Cuddapah.	Ráyachóti	...	3,200	...	...	...	3,200	...	...	
	Proddutur	...	1,302	...	...	...	1,302	...	...	
	Kadiri	...	3,580	...	...	..	3,580	...	...	
		Total ...	8,082	12·63	..	...	8,082	12·63		
Chingleput.	Tiruvallúr	...	3,068	...	6,551	3,068	6,551	...	...	Do.
	Chingleput	...	11,023	...	4,272	3,993	11,302	...	...	Do.
	Saidápet	...	...	...	240	...	240	...	...	
		Total ...	14,091	22·01	11,063	7,061	18,093	28·27		
South Arcot.	No. I, Tiruvannámalai.	...	7,264	...	...	...	7,264	...	...	
	,, II, Tindivanam.	...	43,463	...	...	...	43,463	...	...	
	,, III, Villupuram.	...	25,574	...	...	...	25,574	...	...	
	,, IV, Cuddalore ...	...	10,988	...	...	...	10,988	...	...	
	,, IV, Chidambaram.	...	8,608	...	...	...	8,608	...	...	
	,, V, Tirukoilúr ...	...	15,334	...	...	..	15,334	..	...	
	,, VI, Kallakurchi.	...	34,290	...	...	...	34,290	...	...	
	,, VII, Vriddháchallam.	...	19,702	...	...	...	19,702	...	...	
		Total ...	165,223	258·16	...	...	165,223	258·16		
Tanjore.	Southern range ...	...	6,081	...	...	* 229	5,852	...	...	* By revised estimate.
	To be proposed for notification under section 4.	...	20,485	...	...	...	20,485	...	...	
		Total ...	26,566	41·51	...	229	26,337	41·15		
Trichinopoly.	Trichinopoly	...	2,681	...	...	...	2,681	...	...	
	Udayárpálaiyam ...	...	3,917	...	...	...	3,917	...	...	
	Kulitalai	...	5,837	...	...	...	5,837	...	...	
	Musiri	...	13,485	...	. .	...	13,485	...	...	
	Perambalúr	...	678	...	...	...	678	...	...	
		Total ...	26,598	41·56	...	...	26,598	41·56		
Salem ...	Atúr	...	15,120	...	...		15,120	...	...	
	Tirupatúr	...	26,059	..	...	22,959	3,100	..	...	Transferred to reserved lands.
	Námakal	...	17,500	...	...	...	17,500	...	...	
	Uttankarai	...	19,520	...	...	...	19,520	...	...	
	Krishnagiri	...	12,303	...	...	...	12,303	...	...	
	Hosúr	...	55,920	...	...	...	55,920	...	...	
		Total ...	146,422	228·78	...	22,959	123,463	192·9		
	Total of the Circle ...		386,982	604·65	110·63	30,249	367,796	574·68		

Area of other Forests, 1891-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Southern Circle.									
Madura.	No. I, Cumbum valley.	...	36,486	..	11,953	9,854	38,585	...	...	The exclusions relate chiefly to areas which are not suitable for reservation. The additions are due to revised estimates by reference to village maps.
	,, II, Palni hill ...	...	89,600	...	12,466	7,102	94,964	...		
	,, III, Kanavaipatti.	...	40,666	...	39,106	7,631	72,141	...		
	,, IV, Palamedu ...	...	21,694	...	17,518	5,393	33,819	...	...	
		Total ...	188,446	294·45	81,043	29,980	239,509	374·23		
Tinnevelly.	Tenkarai	...	1,133	...	...	...	1,133	...	...	
	Nángunéri	...	9,691	...	...	...	9,691	...	...	
		Total ...	10,824	16·91	...	...	10,824	16·91		
South Coimbatore.	Udamalpet	...	654	...	...	...	654	...	...	
	Polláchi	...	121	...	...	...	121	...	...	
	Palladam	...	473	...	...	...	473	...	...	
	Bolampatti	...	64	...	...	...	64	...	...	
		Total ...	1,312	2·05	...	...	1,312	2·05		
North Malabar.	Wynaad	...	214,400	335·00	...	...	214,400	335·00	...	
South Malabar.	Nilambúr	...	...		43	...	49	...	...	
	Pálghat	...	89	...	20	(a) 44	65	...	...	(a) By rectification of area.
		Total ...	89	·14	69	44	114	·18		
		Total of the Circle ...	415,071	648·55	81,112	30,024	466,159	728·37		
		Grand Total ...	816,653	1,276·01	92,175	74,273	834,555	1,303·99		

Abstract.

District.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
Northern Circle.						
Vizagapatam	14,600	22·81	...	14,000	600	·94
Central Circle.						
Cuddapah	8,082	12·63	...	...	8,082	12·63
Chingleput	14,091	22·01	11,063	7,061	18,093	28·27
South Arcot	165,223	258·16	...	...	165,223	258·16
Tanjore	26,566	41·51	...	229	26,337	41·15
Trichinopoly	26,598	41·56	...	...	26,598	41·56
Salem	146,422	228·78	...	22,959	123,463	192·9
Total ...	386,982	604·65	11,063	30,249	367,796	574·68
Southern Circle.						
Madura	188,446	294·45	81,043	29,980	239,509	374·23
Sinnevelly	10,824	16·91	...	...	10,824	16·91
South Coimbatore	1,312	2·05	...	...	1,312	2·05
North Malabar	214,400	335·00	...	...	214,400	335·00
South Malabar	89	·14	69	44	114	·18
Total ...	415,071	648·55	81,112	30,024	466,159	728·37
Grand Total ...	816,653	1276·01	92,175	74,273	834,555	1,303·99

ANNUAL FORM No. 60.

Forest Department, Madras Presidency.

AREA of Plantations, 1891–92.

District.	Number of plantations.	On 1st April 1891.		Added during 1891–92.		On 31st March 1892.	
		Area.	Cost.	Area.	Cost.	Total area.	Total cost.
Regular plantations.		ACS.	RS.	ACS.	RS.	ACS.	RS.
Northern Circle—							
Ganjam ..	..	..	..	..	..	..	..
Vizagapatam	..	..	..	..	..	..	..
Godávari	4	127	9,087	10	824	137	9,911
Kistna	16	782	25,114	15	1,769	797	26,883
Anantapur	..	..	..	..	..	..	..
Bellary	..	..	..	..	..	..	..
Kurnool	..	..	..	..	..	..	..
Total	20	909	34,201	25	2,593	934	36,794
Central Circle—							
Nellore	11	2,816	2,46,448	100	3,993	2,916	2,50,441
Cuddapah	8	2,100	51,035	..	677	2,100	51,712
Chingleput	6	396·09	32,868	..	1,244	396·09	34,112
North Arcot	5	1,035·	1,03,811	..	6,705	1,035·	1,10,516
South do.	15	1,867·05	1,09,652	50	3,180	1,917·05	1,12,832
Tanjore	7	708·	15,293	600	1,911	1,308·	17,204
Trichinopoly	22	3,754·01	93,015	..	3,853	3,754·01	96,868
Salem	..	..	..	..	..	..	..
Total	74	12,676·15	6,52,122	750	21,563	13,426·15	6,73,685
Southern Circle—							
Madura	8	105·14	17,253	1·34	565	106·48	17,818
Tinnevelly	..	..	..	..	..	..	..
North Coimbatore	1	97·	35,085	..	381	97·	35,466
South do.	4	26·5	4,810	..	5	26·5	4,815
Nilgiris	9	1,864·50	1,14,766	23	2,524	1,887·50	1,17,290
North Malabar	1	41·50	4,238	..	230	41·50	4,468
South do.	16	3,969·75	2,50,556	100	8,174	4,069·75	2,58,730
South Canara	3	170·18	23,500	..	743	170·18	24,243
Total	52	6,274·57	4,50,208	124·34	12,622	6,398·91	4,62,830
Grand Total	146	19,859·72	11,36,531	899·34	36,778	20,759·06	11,73,309
Cultural operations.							
Northern Circle—							
Direction	..	..	260	..	19	..	279
Ganjam	3	(a) 360	1,680	10	361	370	2,041
Vizagapatam	..	..	..	..	..	..	..
Godávari	..	..	..	..	..	..	..
Kistna	4	..	1,238	..	890	..	2,128
Anantapur	6	52·16	610	..	287	52·16	897
Bellary	3	..	430	..	131	..	561
Kurnool	..	..	82	..	..	..	82
Total	16	412·16	4,300	10	1,688	422·16	5,988
Central Circle—							
Direction	..	..	1,141	..	..	..	1,141
Nellore	8	717·	3,208	40	730	757	3,938
Cuddapah	15	585·	2,658	8	477	593	3,135
Chingleput	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	..
South do.	3	1,326	1,533	..	125	1,326	1,658
Tanjore	20	1,136	2,021	19	48	1,155	2,069
Trichinopoly	10	mls. 100	30,161	..	763	mls. 100	30,924
Salem	..	..	..	..	..	..	..
Total	56	3,764 + mls. 100	40,722	67	2,143	3,831 + mls. 100	42,865
Southern Circle—							
Madura	2	..	19	..	338	..	357
Tinnevelly	7	1,807	3,723	207·20	571	2,014·20	4,294
North Coimbatore	..	..	..	..	..	..	..
South do.	..	..	508	..	..	..	508
Nilgiris	5	45·50	6,633	3·50	906	49	7,539
North Malabar	2	109·	2,038	..	180	109	2,218
South do.	..	..	..	..	..	..	..
South Canara	..	..	38	..	..	..	38
Total	16	1,961·50	12,959	210·70	1,995	2,172·20	14,954
Grand Total	88	6,137·66 + mls. 100	57,981	287·70	5,826	6,425·36 + mls. 100	63,807

(a) Due to recomputation of areas.

ANNUAL FORM NO. 61.

Forest Department, Madras Presidency.

ANNUAL List of Topes and Experimental Gardens.

District.	Number.	Area.	Cost. During year.	Cost. To end of year.	Remarks.
Northern Circle.		ACS.	RS.	RS.	
Ganjam	7	101	..	922	
Vizagapatam	2	56	112	126	
Godávari	..	..	..	..	
Kistna	7	53	182	2,254	
Anantapur	95	2,885	653	5,556	
Bellary	31	240	160	1,197	
Kurnool	27	182	97	9,465	
Total ..	169	3,517	1,204	19,520	
Central Circle.					
Nellore	111	1,752	..	38,044	
Cuddapah	72	1,629	1,139	58,920	
Chingleput	(*a*) 10	(*a*) 101	290	8,744	(*a*) 2 (7·51 acres) constituted during the year.
North Arcot	(*b*) 180	(*c*) 3,305	2,212	36,195	(*b*) The reduced number is due to the exclusion of certain topes held on permanent pattahs. (*c*) By revised estimate.
South do.	* 95	* 408	58	8,871	* Including one tope of 17 acres transferred from the Revenue department.
Tanjore	16	153	..	..	
Trichinopoly	17	(*d*) 77	6	1,799	(*d*) One tope of 5 acres abandoned in 1890–91 wrongly included in previous year's return. One tope of 1 acre taken from Revenue department.
Salem	263	3,061	956	1,99,775	
Total ..	764	10,486	4,661	3,52,348	
Southern Circle.					
Madura	(*e*) 22	(*e*) 89	1,590 — 1,344	18,883	(*e*) One tope of 12 acres sold by public auction in 1890–91 omitted in the return.
Tinnevelly	28	106	362	5,038	
North Coimbatore	183	14,032	96	29,067	
South do.	(*f*) 23	(*f*) 254·98	..	5,361	(*f*) Topes omitted in previous year's return have been included in this.
Nilgiris	..	..	..	..	
North Malabar	1	20	239	3,206	
South do.	(*g*) 1	(*h*) 20	..	9	(*g*) Wrongly shown as 2 in previous year's return. (*h*) By recomputation of area.
South Canara	..	..	..	..	
Total ..	258	14,521·98	2,287 — 1,344	61,564	
Grand Total ..	1,191	28,524·98	8,152 — 1,344	4,33,432	

ANNUAL FORM No. 62.

Forest Department, Madras Presidency.

AREA of Forest Tracts protected from Fire during 1891-92.

District.	UP TO 31ST MARCH 1891.		DURING DRY SEASON OF 1891–92.				Total cost up to 31st March 1892.
	Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.	
Northern Circle.	ACS.	RS.	ACS.	RS.	ACS.	RS.	RS.
Ganjam	317,228	5,594	1,22,930	5,367	117,563	1,816	7,410
Vizagapatam	17,120	627	62,065	5,760	56,305	443	1,070
Godávari	126,256	1,522	115,666	4,225	111,441	635	2,157
Kistna	134,231	5,699	136,113	1,220	134,893	1,403	7,102
Anantapur	(a) 111,480	10,136	149,636	1,365	148,271	2,475	12,611
Bellary	228,466	18,466	67,108	3,448	63,660	3,284	21,750
Kurnool	28,340	6,123	52,780	2,580	50,200	1,755	7,878
Total ..	963,121	48,167	706,298	23,965	682,333	11,811	59,978
Central Circle.							
Nellore	115,280	3,228	117,860	325	117,535	1,260	4,488
Cuddapah	498,606	37,131	528,020	68,283	459,737	6,552	43,683
Chingleput	23,094	3,827	23,871	10	23,861	485	4,312
North Arcot	555,813	20,083	573,975	15,029	558,946	3,485	23,568
South do.	127,543	7,370	130,243	47	130,196	842	8,212
Tanjore	..	..	..	..	..	..	..
Trichinopoly	79,750	2,552	79,750	57	79,693	296	2,848
Salem	30,966	18,711	31,629	..	31,629	1,349	20,060
Total ..	1,431,052	92,902	1,485,348	83,751	1,401,597	14,269	1,07,171
Southern Circle.							
Madura	189,685	32,371	207,183	1,920	205,263	5,379	37,750
Tinnevelly	103,539	20,243	106,239	2,176	104,063	4,110	24,353
North Coimbatore ..	2,364	1,572	2,364	..	2,364	365	1,937
South do. ..	55,768	10,733	57,970	7,260	50,710	2,329	13,062
Nilgiris	170,945	19,190	223,087	33,082	190,005	2,111	21,301
North Malabar	32,782	6,699	33,462	18,054	15,408	1,239	7,938
South do.	74,120	14,268	103,344	..	103,344	2,528	16,796
South Canara	16,356	5,066	16,381	225	16,156	1,177	6,243
Total ..	645,559	1,10,142	750,030	62,717	687,313	19,238	1,29,380
Grand Total ..	3,039,732	2,51,211	2,941,676	1,70,433	2,771,243	45,318	2,96,529

(a) The difference of area between the closing balance of 1890–91 and this figure is due to Survey and Computation.

Annual Form No. 63.

Forest Department, Madras Presidency.

Prosecutions for Breaches of Forest Rules during 1891–92.

District.	Cases pending from 1890–91.	New cases of the year.					Total cases.	Disposed of during the year.										Cases pending at close of the year.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Compounded.		Withdrawn.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle.																		
Ganjam	60	2	103	6	29	140	200	53	143	(*b*) 12	74	..	..	..	..	65	217	135
Vizagapatam	170 (*a*)— 12	..	627	33	3	663	821	408	425	45	66	278	347	..	..	731	838	90
Godávari	69	..	13	3	13	29	98	13	67	74	102	5	8	..	..	92	177	6
Kistna	29	..	432	56	13	501	530	130	550	55	114	171	665	3	..	359	1,329	171
Anantapur	12	3	89	17	4	113	125	55	122	8	35	24	70	..	..	87	227	38
Bellary	2	1	140	18	5	164	166	101	309	26	77	34	..	..	..	161	386	5
Kurnool	19	2	311	66	21	400	419	231	615	82	277	83	213	..	..	396	1,105	23
Total ..	349	8	1,715	199	88	2,010	2,359	991	2,231	302	745	595	1,303	3	..	1,891	4,279	468
Central Circle.																		
Nellore	20	..	108	1	5	114	134	50	171	48	172	14	40	..	..	112	383	22
Cuddapah	22	5	417	148	36	606	628	210	639	55	227	185	315	..	..	450	1,181	178
Chingleput	1	..	170	1	3	174	175	95	138	55	114	..	..	..	..	150	252	25
North Arcot	12	15	155	176	354	700	712	97	208	38	121	504	725	..	..	639	1,054	73
South Arcot	360	6	518	425	97	1,046	1,406	214	743	40	111	478	1,164	183	347	915	2,365	491
Tanjore	12	..	12	5	1	18	30	8	38	5	15	14	68	..	..	27	121	3
Trichinopoly	54	..	473	446	30	949	1,003	242	343	53	130	645	1,139	..	..	940	1,612	63
Salem	32	1	705	325	85	1,116	1,148	435	1,568	121	689	498	2,267	61	186	1,115	4,710	33
Total ..	513	27	2,558	1,527	611	4,723	5,236	1,351	3,848	415	1,579	2,338	5,718	244	533	4,348	11,678	888
Southern Circle.																		
Madura	2	6	18	1	3	28	30	13	33	10	35	6	25	1	1	30	94	..
Tinnevelly. Under Forest Act	4	4	38	76	25	143	147	83	200	39	139	2	3	8	14	132	356	15
Tinnevelly. Under Penal Code	5	1	15	2	1	19	24	14	22	9	25	..	..	1	2	24	49	..
North Coimbatore	40	1	81	94	5	181	221	31	106	34	194	96	299	11	71	172	670	49
South Coimbatore	59	5	177	238	28	448	507	119	333	23	113	289	853	30	97	461	1,396	46
Nilgiris	3	5	47	62	12	126	129	16	61	7	21	68	182	2	3	93	267	36
North Malabar	..	1	13	9	2	25	25	2	4	2	3	21	68	..	..	25	75	..
South Malabar. Under Forest Act	..	..	3	1	9	13	13	7	29	5	7	..	..	..	..	12	36	1
South Malabar. Under Penal Code	..	..	4	..	1	5	5	5	10	..	..	..	..	..	..	5	10	
South Canara	61	2	401	..	..	403	464	236	344	82	129	97	119	..	..	415	592	49
Total ..	174	25	797	483	86	1,391	1,565	526	1,142	211	666	579	1,549	53	188	1,369	3,515	196
Grand Total ..	1,036	60	5,070	2,209	785	8,124	9,160	2,868	7,221	928	2,990	3,512	8,570	300	721	7,608	19,502	1,552

(*a*) Withdrawn at the end of 1890–91.

(*b*) Includes cases compounded. The District Forest-officer does not give them separately.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Northern Circle.

Summary of Revenue of the different districts, 1891–92.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godávari.	Kistna.	Anantapur.	Bellary.	Kurnool.	Total.
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—									
(*a*) Timber	..	14,545	23	11,492	66	116	..	..	26,242
(*b*) Firewood and charcoal ..	..	1,219	20	1,552	283	14	234	..	3,322
(*c*) Bamboos	..	55	..	..	..	5	..	180	240
(*d*) Sandal-wood	..	..	..	..	..	..	..	..	..
(*e*) Grass and other minor produce	..	5	..	..	24	141	280	168	618
II. Timber and other produce removed from the forests by consumers or purchasers—									
(*a*) Timber	..	4,905	1,802	41,104	27,138	3,652	4,581	36,997	1,20,179
(*b*) Firewood and charcoal ..	..	8,867	5,645	7,721	12,313	2,512	6,544	10,802	54,404
(*c*) Bamboos	..	4,466	4,706	29,997	1,928	236	1,074	14,197	56,604
(*d*) Grazing and fodder grass	..	131	108	3,831	43,479	1,806	8,578	12,078	70,011
(*e*) Other minor produce ..	..	1,839	2,753	9,086	21,746	17,117	24,139	9,159	85,839
III. Confiscated drift and waif-wood.	..	29	25	4,653	823	669	138	2,730	9,067
IV. Revenue from forests not managed by Government	..	25	..	..	..	..	..	..	25
V. Miscellaneous—									
(*a*) Fines and forfeitures ..	..	62	..	51	36	13	..	2	164
(*b*) Refunds	117	39	26	76	..	5	62	185	510
(*c*) Other sources	20	354	949	3,183	3,334	690	369	2,556	11,455
Total Receipts ..	137	36,541	16,057	1,12,746	1,11,170	26,976	45,999	89,054	4,38,680

MADRAS,
7th July 1892.

(Signed) A. W. C. STANBROUGH,
Acting Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Central Circle.

Summary of Revenue of the different districts, 1891–92.

Budget heads.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	South Arcot.	Tanjore.	Trichinopoly.	Salem.	Total.
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber	..	125	6,797	..	9,313	279	..	2	1,820	18,336
(*b*) Firewood and charcoal ..	..	28,719	5,411	..	28,440	7,794	98	19,918	320	90,700
(*c*) Bamboos ..	..	..	57	..	11	..	..	..	118	186
(*d*) Sandal-wood ..	..	..	..	..	..	19	..	..	7,872	7,891
(*e*) Grass and other minor produce.	..	2,105	526	..	8	..	..	..	..	2,639
II. Timber and other produce removed from the forests by consumers or purchasers—										
(*a*) Timber ..	..	11,475	13,204	2,444	12,509	7,754	1,328	14,471	18,864	82,049
(*b*) Firewood and charcoal ..	..	4,245	23,599	6,715	25,622	23,960	4,433	15,685	21,717	1,25,976
(*c*) Bamboos ..	..	104	5,272	125	29,622	4,886	660	4,307	21,904	66,880
(*d*) Grazing and fodder grass..	..	13,861	11,629	909	13,525	4,094	649	5,162	10,121	59,950
(*e*) Other minor produce ..	..	16,361	40,998	21,412	40,417	36,916	3,983	24,234	42,207	2,26,528
III. Confiscated drift and waif-wood	..	93	1,576	4	217	239	27	142	705	3,003
IV. Revenue from forests not managed by Government—										
V. Miscellaneous—										
(*a*) Fines and forfeitures	..	..	12	..	20	44	..	..	83	159
(*b*) Refunds	64	12	90	28	213	363	6	191	160	1,127
(*c*) Other sources ..	55	62	2,040	222	4,023	3,247	124	2,198	4,460	16,431
Total Receipts ..	119	77,162	1,11,211	31,859	1,63,940	89,595	11,308	86,310	1,30,351	7,01,855

MADRAS,
7th July 1892.

(Signed) A. W. C. STANBROUGH,
Acting Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Southern Circle.

Summary of Revenue of the different districts, 1891–92.

Budget heads.	Direction.	Madura.	Tinnevelly.	North Coimbatore.	South Coimbatore.	Nilgiris.	North Malabar.	South Malabar.	South Canara.	Total.
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber ..	81	5,887	7,213	78	39,603	5,575	13,148	45,214	4,042	1,20,841
(*b*) Firewood and charcoal ..	..	4,882	6,082	..	2,112	19,686	..	327	1,409	34,498
(*c*) Bamboos ..	..	179	..	..	63	..	..	531	66	839
(*d*) Sandal-wood ..	..	..	..	23,960	..	12,315	..	..	..	36,275
(*e*) Grass and other minor produce.	..	..	250	..	11,734	69	60	1,245	28,177	41,535
II. Timber and other produce removed from the forests by consumers or purchasers—										
(*a*) Timber ..	..	7,861	5,893	11,432	4,875	1,336	9,504	4,614	1,788	47,303
(*b*) Firewood and charcoal ..	..	4,426	44,198	8,198	11,365	368	17	5,046	4,535	78,153
(*c*) Bamboos ..	..	1,824	537	10,236	4,896	2,077	407	965	717	21,659
(*d*) Grazing and fodder grass..	..	1,383	2,158	37,032	9,324	3,323	397	144	..	53,761
(*e*) Other minor produce ..	..	37,459	14,413	27,812	8,058	1,859	2,630	593	4,687	97,511
III. Confiscated drift and waif-wood ..	..	228	196	543	134	27	3	10	543	1,684
IV. Revenue from forests not managed by Government—										
V. Miscellaneous—										
(*a*) Fines and forfeitures	..	..	555	384	215	..	..	72	..	1,226
(*b*) Refunds ..	454	71	2,271	10	904	71	19	..	52	3,852
(*c*) Other sources ..	22	851	951	2,222	3,661	1,140	1,262	2,204	2,230	14,543
Total Receipts ..	557	65,051	84,717	1,21,907	96,944	47,846	27,447	60,965	48,246	5,53,680

MADRAS,
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ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Northern Circle.

Summary of Expenditure of the different districts, 1891–92.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godávari.	Kistna.	Anantapur.	Bellary.	Kurnool.	Total.
A.—Conservancy and Works.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government agency—									
(*a*) Timber	..	5,231	20	2,505	6	47	..	280	8,089
(*b*) Firewood and charcoal	..	1,280	33	..	577	..	199	50	2,139
(*c*) Bamboos	..	..	..	..	..	..	..	170	170
(*d*) Sandalwood ..	..	..	..	..	..	..	..	..	..
(*e*) Grass and other minor produce ..	..	..	..	..	31	56	1	4,618	4,706
II. Timber and other produce removed from the forests by consumers or purchasers	149	2,734	1,977	6,521	4,487	1,363	842	9,651	27,724
III. Confiscated, drift and waif-wood	..	983	14	1,080	32	20	1	619	2,749
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..
V. Rent of leased forests, and payments to shareholders in forests managed by Government	..	..	..	..	..	..	10,000	..	10,000
VI. Live-stock, stores, tools and plant—									
(*a*) Purchase of cattle ..	..	..	..	..	..	..	..	..	..
(*b*) Feed and keep of cattle	272	339	..	2,119	..	..	..	..	2,730
(*c*) Stores, tools and plant	93	403	12	300	506	5	1	240	1,560
VII. Communications and buildings—									
(*a*) Roads and bridges..	..	107	..	532	1,650	370	298	1,954	4,911
(*b*) Buildings	..	3,136	664	1,788	1,172	1,011	95	3,243	11,109
(*c*) Other works ..	..	55	..	..	1,245	..	..	30	1,330
VIII. Demarcation, improvement and extension of forests—									
(*a*) Demarcation ..	..	1,225	395	769	1,662	298	335	2,224	6,908
(*b*) Compensation for land and rights ..	..	..	..	..	2,278	700	363	..	3,341
(*c*) Surveys and working plans	886	848	5	548	534	1,477	362	783	5,443
(*d*) Plantations ..	19	361	112	824	2,841	940	291	97	5,485
(*e*) Protection from fire.	..	1,816	443	635	1,403	2,475	3,284	1,755	11,811
(*f*) Other works ..	..	339	9	865	1,816	54	1,233	30	4,346
IX. Miscellaneous—									
(*a*) Refunds	..	72	..	659	443	21	6	278	1,479
(*b*) Law charges ..	..	..	15	3	15	..	28	3	64
(*c*) Other charges ..	1	2	..	190	519	51	7	110	880
Total A.— Conservancy and works..	1,420	18,931	3,699	19,338	21,217	8,888	17,346	26,135	1,16,974

MADRAS,
7th July 1892.

(Signed) A. W. C. STANBROUGH,
Acting Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Central Circle.

Summary of Expenditure of the different districts, 1891–92.

Budget heads.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	South Arcot.	Tanjore.	Trichinopoly.	Salem.	Total.
A.—Conservancy and Works.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government agency—										
(*a*) Timber ..	..	39	2,059	..	1,268	95	84	..	1,361	4,906
(*b*) Firewood and charcoal ..	..	25,829	3,618	..	6,716	2,426	33	7,686	248	46,556
(*c*) Bamboos ..	..	..	1	..	323	..	..	..	64	388
(*d*) Sandalwood ..	..	..	..	..	71	..	..	..	610	681
(*e*) Grass and other minor produce ..	..	3,463	5,421	64	3,470	..	..	..	438	12,856
II. Timber and other produce removed from the forests by consumers or purchasers ..	149	640	7,947	1,113	2,157	2,233	421	2,061	10,138	26,859
III. Confiscated, drift and waifwood	..	11	87	1	48	7	..	4	69	227
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government		..	..	..	..	..	..	..	10	10
VI. Live-stock, stores, tools and plants—										
(*a*) Purchase of cattle	..	..	..	..	..	..	..	..	..	..
(*b*) Feed and keep of cattle ..	..	..	..	..	..	..	..	..	..	..
(*c*) Stores, tools and plant ..	68	90	15,494	49	3,470	115	1	86	97	19,470
VII. Communications and buildings—										
(*a*) Roads and bridges ..	..	..	3,492	297	724	2,094	14	283	745	7,649
(*b*) Buildings ..	..	953	2,929	409	5,609	1,734	8	1	1,513	13,156
(*c*) Other works ..	..	..	410	..	515	187	..	..	..	1,112
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	805	1,405	2,584	10,388	1,380	558	930	3,782	21,832
(*b*) Compensation for land and rights ..	5	..	1,324	2	1,748	16	..	206	1,157	4,458
(*c*) Surveys and working plans ..	423	549	830	233	375	1,004	48	178	466	4,106
(*d*) Plantations ..	..	4,723	2,293	1,534	8,917	3,363	1,959	4,622	956	28,367
(*e*) Protection from fire	..	1,260	6,552	485	3,485	842	..	296	1,349	14,269
(*f*) Other works ..	..	466	692	1,990	9,966	4,640	1,934	4,317	7,221	31,226
IX. Miscellaneous—										
(*a*) Refunds	..	214	482	898	317	2,233	67	78	3,112	7,401
(*b*) Law charges ..	1	206	20	1	905	..	45	6	109	1,293
(*c*) Other charges ..	5	15	40	282	137	97	..	15	66	657
Total A.—Conservancy and works..	651	39,263	55,096	9,942	60,609	22,466	5,172	20,769	33,511	2,47,479

MADRAS,
7th July 1892.

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Acting Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Southe n Circle.

Summary of Expenditure of the different districts, 1891–92.

Budget heads.	Direction.	Madura.	Tinnevelly.	North Coimbatore.	South Coimbatore.	Nilgiris.	Malabar (North).	Malabar (South).	South Canara.	Total.
A.—Conservancy and Works:	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government agency—										
(*a*) Timber ..	..	2,341	3,517	15	12,102	1,576	1,806	8,282	3,347	32,986
(*b*) Firewood and charcoal ..	..	3,016	3,008	..	754	13,804	..	..	1,160	21,742
(*c*) Bamboos ..	..	426	..	..	29	..	..	..	21	476
(*d*) Sandalwood ..	...	..	..	3,433	..	857	..	..	..	4,290
(*e*) Grass and other minor produce	..	..	230	..	7,514	55	22	474	15,419	23,714
II. Timber and other produce removed from the forests by consumers or purchasers ..	149	2,474	2,086	8,005	3,832	1,354	15	17	3,836	21,768
III. Confiscated, drift and waifwood	..	65	13	84	4	3	..	..	1	170
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests, and payments to shareholders in forests managed by Government	..	..	..	..	2,500	4,500	..	1,540	..	8,540
VI. Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle ..	..	..	..	..	523	..	81	391	..	995
(*b*) Feed and keep of cattle ..	..	822	..	..	4,145	886	2,377	5,616	..	13,846
(*c*) Stores, tools and plant ..	68	342	373	125	9,111	244	192	285	26	10,766
VII. Communications and buildings—										
(*a*) Roads and bridges ..	..	2,146	3,958	4,093	5,502	1,416	572	549	..	18,236
(*b*) Buildings ..	..	3,329	1,477	1,550	4,280	663	1,041	1,304	126	13,770
(*c*) Other works ..	..	480	75	..	96	14	55	502	2	1,224
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	13,204	902	2,115	1,233	1,403	125	110	562	19,654
(*b*) Compensation for land and rights ..	..	17	..	..	..	..	25	2,503	..	2,545
(*c*) Surveys and working plans	75,923	1,882	1,011	8	458	169	24	5	2,214	81,694
(*d*) Plantations ..	..	3,605	933	477	5	3,430	649	8,174	743	18,016
(*e*) Protection from fire	..	5,379	4,110	365	2,329	2,111	1,239	2,528	1,177	19,238
(*f*) Other works ..	..	338	4,101	257	3,473	49	172	744	410	9,544
IX. Miscellaneous—										
(*a*) Refunds ..	..	1,390	328	246	20	15	..	..	61	2,060
(*b*) Law charges ..	..	..	27	16	32	..	16	..	1	92
(*c*) Other charges ..	20	1	233	59	213	147	9	5	39	726
Total A.—Conservancy and works ..	76,160	41,257	26,382	20,848	58,155	32,696	8,420	33,029	29,145	3,26,092

MADRAS,
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ANNUAL FORM No 64.

Forest Department, Madras Presidency, Northern Circle.

Summary of Expenditure of the different districts, 1891–92.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godávari.	Kistna.	Anantapur.	Bellary.	Kurnool.	Total.
B.—"*Establishments.*"	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward, Total A. "Conservancy and Works" ..	1,420	18,931	3,699	19,338	21,217	8,888	17,346	26,135	1,16,974
I.—Salaries—									
(*a*) Conservators	12,495	..	..	..	..	..	..	..	12,495
(*b*) Superior officers	11,684	6,936	3,000	4,571	3,000	3,125	2,942	4,200	39,458
(*c*) Subordinate forest and depôt establishments ..	1,367	4,221	2,251	7,866	6,922	5,130	5,812	8,683	42,252
(*d*) Office establishments ..	11,916	1,646	900	1,988	1,851	1,464	1,315	2,155	23,235
(*e*) Deputation and special allowances	575	..	..	..	..	..	..	..	575
II.—Travelling allowances—									
(*a*) Conservators	2,110	..	..	..	..	..	..	..	2,110
(*b*) Superior officers	1,652	1,449	706	726	763	714	776	1,126	7,912
(*c*) Subordinate forest and depôt establishments ..	517	1,951	570	2,504	1,853	1,557	1,389	2,852	13,193
(*d*) Office establishments ..	1,288	407	139	316	680	335	199	537	3,901
III.—Contingencies—									
(*a*) Stationery	9	..	6	..	..	..	..	..	15
(*b*) Carriage of tents and records	224	56	56	72	238	130	160	87	1,023
(*c*) Rents, rates and taxes ..	132	250	298	173	1	23	3	4	884
(*d*) Pay of police guards ..	..	..	..	..	..	..	..	..	..
(*e*) Official postage	777	274	113	405	620	284	357	411	3,241
(*f*) Sundries	1,375	301	318	194	228	103	262	102	2,883
Total B.—"Establishments" ..	46,121	17,491	8,357	18,815	16,156	12,865	13,215	20,157	1,53,177
Grand Total of expenditure ..	47,541	36,422	12,056	38,153	37,373	21,753	30,561	46,292	2,70,151

MADRAS,
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ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Central Circle.

Summary of Expenditure of the different districts, 1891–92.

Budget heads.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	South Arcot.	Tanjore.	Trichinopoly.	Salem.	Total.
B.—"Establishments."	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward, Total A. "Conservancy and Works"	651	39,263	55,096	9,942	60,609	22,466	5,172	20,769	33,511	2,47,479
I.—Salaries—										
(*a*) Conservators ..	7,035	..	..	..	..	..	..	..	..	7,035
(*b*) Superior officers ..	22,396	6,600	11,012	3,000	3,000	8,424	..	9,600	4,034	68,066
(*c*) Subordinate forest and depot establishments	782	6,797	11,331	3,133	10,159	11,428	1,143	4,065	12,036	60,874
(*d*) Office establishment	13,011	2,308	2,854	1,270	3,110	2,946	593	1,796	2,715	30,603
(*e*) Deputation and special allowances.	575	..	..	..	..	..	..	..	..	575
II.—Travelling allowances—										
(*a*) Conservators ..	338	..	..	..	..	..	..	..	..	338
(*b*) Superior officers ..	6,452	1,027	2,082	991	1,419	660	334	1,074	861	14,900
(*c*) Subordinate forest and depot establishments	285	1,819	2,900	752	3,148	2,960	311	1,302	3,800	17,277
(*d*) Office establishments	2,625	315	576	204	650	314	148	402	328	5,562
III.—Contingencies—										
(*a*) Stationery	2	9	1	1	1	..	..	..	1	15
(*b*) Carriage of tents and records ..	1,006	200	44	97	124	151	60	98	355	2,135
(*c*) Rents, rates and taxes	..	..	17	5	..	630	..	56	64	772
(*d*) Pay of police guards	..	..	..	..	..	..	..	..	..	..
(*e*) Official postage ..	517	195	447	240	886	808	159	380	1,003	4,635
(*f*) Sundries	856	193	315	49	527	605	123	458	537	3,663
Total B.—"Establishments"	55,880	19,463	31,579	9,742	23,024	28,926	2,871	19,231	25,734	2,16,450
Grand Total of Expenditure ..	56,531	58,726	86,675	19,684	83,633	51,392	8,043	40,000	59,245	4,63,929

MADRAS,
7th July 1892.

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Acting Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Southern Circle.

Summary of Expenditure of the different districts, 1891–92.

Budget heads.	Direction.	Madura.	Tinnevelly.	North Coimbatore.	South Coimbatore.	Nilgiris.	North Malabar.	South Malabar.	South Canara.	Total.
B.—"Establishments."	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward, Total A. "Conservancy and Works"	76,160	41,257	26,382	20,848	58,155	32,696	8,420	33,029	29,145	3,26,092
I.—Salaries—										
(*a*) Conservators ..	16,826	..	..	..	..	..	..	..	..	16,826
(*b*) Superior officers ..	4,896	10,381	5,891	6,699	10,700	10,719	2,749	9,479	10,012	71,526
(*c*) Subordinate forest and depot establishments ..	2,042	7,950	8,952	6,427	7,961	8,508	5,212	4,987	4,781	56,820
(*d*) Office establishments	11,520	2,196	2,793	2,664	3,055	2,201	2,603	1,609	2,158	30,799
(*e*) Deputation and special allowances	574	..	..	..	..	..	..	..	..	574
II.—Travelling allowances—										
(*a*) Conservators ..	2,904	..	..	..	..	..	..	..	..	2,904
(*b*) Superior officers ..	430	1,746	2,033	2,227	1,877	1,405	704	1,198	1,612	13,232
(*c*) Subordinate forest and depot establishments ..	1,484	2,792	3,100	2,120	2,279	2,211	1,287	1,324	1,116	17,713
(*d*) Office establishments	763	706	716	495	461	51	96	161	243	3,692
III.—Contingencies—										
(*a*) Stationery ..	2	..	..	..	1	..	..	..	..	3
(*b*) Carriage of tents and records ..	235	221	240	176	137	4	3	..	314	1,330
(*c*) Rents, rates and taxes	75	41	30	73	51	90	..	1	27	388
(*d*) Pay of police guards	..	..	..	..	..	..	..	..	..	..
(*e*) Official postage ..	737	566	610	491	350	221	109	160	675	3,919
(*f*) Sundries	1,919	218	418	484	394	337	108	62	91	4,031
Total B.—"Establishments"	44,407	26,817	24,783	21,856	27,266	25,747	12,871	18,981	21,029	2,23,757
Grand Total of Expenditure	1,20,567	68,074	51,165	42,704	85,421	58,443	21,291	52,010	50,174	5,49,849

MADRAS,
7th July 1892.

(Signed) A. W. C. STANBROUGH,
Acting Examiner of Forest Accounts.

Annual Form No. 64.

Forest Department, Madras Presidency.

Grand Total for the Presidency.

Budget heads Receipts.	Rs.	Budget heads Expenditure—A. Conservancy and works.	Rs.	Budget heads Expenditure—B. Establishments.	Rs.
I. Timber and other produce removed from the forests by Government Agency—		I. Timber and other produce removed from the forests by Government Agency—		Brought forward, Total, A. Conservancy and works	6,90,545
(a) Timber ..	1,65,419	(a) Timber	45,981		
(b) Firewood and charcoal ..	1,28,520	(b) Firewood and charcoal	79,437	I. Salaries—	
(c) Bamboos ..	1,265	(c) Bamboos	1,034	(a) Conservators ..	36,356
(d) Sandalwood ..	44,166	(d) Sandalwood ..	4,971	(b) Superior officers..	1,79,050
(e) Grass and other minor produce.	44,792	(e) Grass and other minor produce ..	41,276	(c) Subordinate forest and depôt establishments ..	1,59,946
II. Timber and other produce removed from the forests by consumers or purchasers—		II. Timber and other produce removed from the forests by consumers or purchasers	76,351	(d) Office establishments	84,637
(a) Timber ..	2,49,531	III. Confiscated drift and waifwood	3,146	(e) Deputation and special allowances	1,724
(b) Firewood and charcoal ..	2,58,533	IV. Revenue from forests not managed by Government	..	II. Travelling allowances—	
(c) Bamboos ..	1,45,143	V. Rent of leased forests and payments to shareholders in forests managed by Government	18,550	(a) Conservators ..	5,352
(d) Grazing and fodder grass ..	1,83,722	VI. Live-stock, stores, tools and plant—		(b) Superior officers..	36,044
(e) Other minor produce ..	4,09,878	(a) Purchase of cattle ..	995	(c) Subordinate forest and depôt establishments ..	48,183
III. Confiscated drift and waifwood	13,754	(b) Feed and keep of cattle	16,576	(d) Office establishments	13,155
IV. Revenue from forests not managed by Government	25	(c) Stores, tools and plant	31,795	III. Contingencies—	
V. Miscellaneous—		VII. Communications and buildings—		(a) Stationery ..	33
(a) Fines and forfeitures	1,549	(a) Roads and bridges..	30,796	(b) Carriage of tents and records ..	4,488
(b) Refunds	5,489	(b) Buildings	38,035	(c) Rents, rates and taxes	2,044
(c) Other sources ..	42,429	(c) Other works ..	3,666	(d) Pay of Police guards	..
		VIII. Demarcation, improvement and extension of forests—		(e) Official postage ..	11,795
		(a) Demarcation ..	48,394	(f) Sundries.. ..	10,577
		(b) Compensation for land and rights ..	10,344		
		(c) Surveys and working plans ..	91,243		
		(d) Plantations ..	51,868		
		(e) Protection from fire.	45,318		
		(f) Other works ..	45,116		
		IX. Miscellaneous—			
		(a) Refunds	10,940		
		(b) Law charges ..	1,449	Total, B. Establishments	5,93,384
		(c) Other charges ..	2,263		
Total Receipts ..	16,94,215	Total, A. Conservancy and works	6,90,545	Grand Total of Expenditure	12,83,929

Annual Form No. 65.

Forest Department, Madras Presidency, Northern Circle.

Outstandings and Liabilities on account of contractors and disbursers for 1891–92.

District.	Department Debtor.			Department Creditor.			Balance due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Conservator, Northern Circle	..	2,863 5 2	2,863 5 2	34 13 11	2,854 0 0	2,888 13 11	25 8 9	..
Forest Settlement-officer, Kistna, &c.	..	..	..	..	..	..	..	..
Forest School, Dehra Dún	..	50 0 0	50 0 0	50 0 0	420 0 0	470 0 0	420 0 0	..
One-third of Examiner's office	..	713 2 11	713 2 11	49 9 9	908 2 1	957 11 10	244 8 11	..
Ganjam	..	24,811 9 1	24,811 9 1	2,842 1 7	24,154 6 1	26,996 7 8	2,184 14 7	..
Vizagapatam	..	7,245 1 3	7,245 1 3	291 13 2	7,141 9 2	7,433 6 4	188 5 1	..
Godávari	..	32,732 8 10	32,732 8 10	3,282 10 7	31,603 3 11	34,885 14 6	2,153 5 8	..
Kistna	..	31,584 2 3	31,584 2 3	68 11 0	31,694 15 11	31,763 10 11	179 8 8	..
Anantapur	..	14,266 2 1	14,266 2 1	206 11 7	14,277 11 0	14,484 6 7	218 4 6	..
Bellary	..	19,005 8 6	19,005 8 6	109 10 2	19,289 11 8	19,399 5 10	393 13 4	..
Kurnool	..	39,606 4 10	39,606 4 10	350 11 2	40,182 10 9	40,533 5 11	927 1 1	..
Total	..	1,72,877 12 11	1,72,877 12 11	7,286 12 11	1,72,526 6 7	1,79,813 3 6	6,935 6 7	..

Madras,
7th July 1892.

(Signed) A. W. C. STANBROUGH,
Acting Examiner of Forest Accounts.

Annual Form No. 65.

Forest Department, Madras Presidency, Central Circle.

Outstandings and Liabilities on account of contractors and disbursers for 1891–92.

District.	Department Debtor.			Department Creditor.			Balance Due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Conservator, Central Circle	..	1,526 3 10	1,526 3 10	..	1,556 3 11	1,556 3 11	30 0 1	..
Forest Settlement-officer, Nellore and Bellary	..	398 2 0	398 2 0	17 4 0	420 4 0	437 8 0	39 6 0	..
Do. Trichinopoly, &c.	..	94 7 0	94 7 0	..	94 7 0	94 7 0	..	..
One-third of Examiner's office	..	713 2 10	713 2 10	49 9 8	908 2 0	957 11 8	244 8 10	..
Nellore	..	53,116 13 4	53,116 13 4	1,805 4 11	52,170 15 0	53,976 3 11	859 6 7	..
Cuddapah	..	49,412 10 2	49,412 10 2	1,345 7 11	48,699 4 11	50,044 12 10	632 2 8	..
Chingleput	..	14,629 7 0	14,629 7 0	89 1 7	14,602 10 0	14,691 11 7	62 4 7	..
North Arcot	..	93,758 1 2	93,758 1 2	3,111 6 10	93,408 2 6	96,519 9 4	2,761 8 2	..
South Arcot	..	43,135 8 6	43,135 8 6	1,699 14 2	43,217 10 4	44,917 8 6	1,782 0 0	..
Tanjore	..	8,351 1 9	8,351 1 9	60 9 6	8,471 13 6	8,532 7 0	181 5 3	..
Trichinopoly	..	27,854 0 1	27,854 0 1	186 8 10	27,773 5 8	27,959 14 6	105 14 5	..
Salem	..	49,424 10 9	49,424 10 9	903 7 11	49,653 6 10	50,556 14 9	1,132 4 0	..
Total	..	3,42,414 4 5	3,42,414 4 5	9,268 11 4	3,40,976 5 8	3,50,245 1 0	7,830 12 7	..

Madras,
7th July 1892.

(Signed) A. W. C. STANBROUGH,
Acting Examiner of Forest Accounts.

ANNUAL FROM No. 65.

Forest Department, Madras Presidency, Southern Circle.

Outstandings and Liabilities on account of contractors and disbursers for 1891–92.

District.	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	Rs. A. A.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Conservator, Southern Circle	..	2,848 12 6	2,848 12 6	210 0 6	2,791 15 11	3,002 0 5	153 3 11	..
Forest School, Dehra Dun	..	1,257 2 6	1,257 2 6	69 10 8	1,224 7 10	1,294 2 6	37 0 0	..
One-third of Examiner's office	..	713 2 11	713 2 11	49 9 8	908 2 0	957 11 8	244 8 9	..
Madura	..	87,474 3 0	87,474 3 0	1,043 13 5	87,705 10 6	88,749 7 11	1,275 4 11	..
Tinnevelly	..	52,388 9 7	52,388 9 7	2,496 3 5	53,707 4 2	56,203 7 7	3,814 14 0	..
Coimbatore, North	..	21,669 14 2	21,669 14 2	140 15 3	21,711 3 10	21,852 3 1	182 4 11	..
Coimbatore, South	..	37,922 15 4	37,922 15 4	1,448 9 9	37,751 0 9	39,199 10 6	1,276 11 2	..
Nilgiris	..	31,100 9 7	31,100 9 7	137 12 10	31,201 1 3	31,338 14 1	238 4 6	..
Malabar, North	..	9,726 11 0	9,726 11 0	951 4 0	9,403 6 3	10,354 10 3	627 15 3	..
Malabar, South	..	15,598 3 2	15,598 3 2	408 0 4	15,608 14 9	16,016 15 1	418 11 11	..
South Canara	..	30,493 8 3	30,493 8 3	7,805 12 2	38,250 3 3	46,055 15 5	15,562 7 2	..
Total ..	..	2,91,193 12 0	2,91,193 12 0	14,761 12 0	3,00,263 6 6	3,15,025 2 6	23,831 6 6	..

MADRAS,
7th July 1892.

(Signed) A. W. C. STANBROUGH,
Acting Examiner of Forest Accounts.

GRAND TOTAL for the Presidency.

Department Debtor.			Department Creditor.			Balance due.	
At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
..	Rs. A. P. 8,06,485 13 4	Rs. A. P. 8,06,485 13 4	Rs. A. P. 31,317 4 3	Rs. A. P. 8,13,766 2 9	Rs. A. P. 8,45,083 7 0	Rs. A. P. 38,597 9 8	..

ANNUAL FORM No. 66.

Forest Department, Madras Presidency, Northern Circle.

REVENUE received and Outstandings on account of revenue during 1891–92.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Direction	Timber and other produce ..	...	137 8 11	137 8 11	137 8 11	..	
Ganjam	Do. do. ..	784 9 6	36,143 8 9	36,928 2 3	36,541 1 3	387 1 0	
Vizagapatam	Do. do. ..	...	16,056 12 5	16,056 12 5	16,056 12 5	..	
Godávari	Do. do. ..	517 0 0	1,12,383 15 3	1,12,900 15 3	1,12,746 3 3	154 12 0	
Kistna	Do. do. ..	2,529 5 3	1,10,171 0 8	1,12,700 5 11	1,11,169 5 5 (a) + 250 6 0	1,280 10 6	(a) Written off the accounts as per Government Order, No. 1026, Revenue, of 29th October 1891, and Board's Proceedings, No. 676, Land Revenue, of 27th November 1891.
Anantapur	Do. do. ..	..	26,994 1 11	26,994 1 11	26,976 1 11	18 0 0	
Bellary	Do. do. ..	1,263 13 2	48,027 0 0	49,290 13 2	45,999 6 2 (b) + 83 8 0	3,207 15 0	(b) Written off the accounts as per Government Order, communicated in Board's Proceedings, Mis. No. 153, dated 17th February 1892.
Kurnool	Do. do. ..	..	89,193 3 10	89,193 3 10	89,053 11 0	139 8 10	
	Total ..	5,094 11 11	4,39,107 3 9	4,44,201 15 8	4,38,680 2 4 + 333 14 0	5,187 15 4	

MADRAS,
7th July 1892.

(Signed) A. W. C. STANBROUGH,
Acting Examiner of Forest Accounts.

ANNUAL FORM No. 66.

Forest Department, Madras Presidency, Central Circle.

Revenue received and Outstandings on account of revenue during 1891–92.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other rev enue during year.	Total.	Amount realized during year.	Balance due to the depart ment at end of year.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Direction	Timber and other produce ..	..	119 12 7	119 12 7	119 12 7	..
Nellore	Do. do.	...	77,661 12 3	77,661 12 3	77,161 12 3	500 0 0
Cuddapah	Do. do.	599 11 0	1,10,670 5 7	1,11,270 0 7	1,11,211 9 7	58 7 0
Chingleput	Do. do.	..	31,858 10 6	31,858 10 6	31,858 10 6	..
North Arcot	Do. do.	1,780 6 7	1,62,807 10 0	1,64,588 0 7	1,63,939 14 2	648 2 5
South Arcot	Do. do.	2,601 8 0	87,064 0 7	89,665 8 7	89,595 7 7	70 1 0
Tanjore	Do. do.	36 0 0	11,284 0 6	11,320 0 6	11,307 8 6	12 8 0
Trichinopoly	Do. do.	4,191 1 0	84,369 2 5	88,560 3 5	86,310 1 6	2,250 1 11
Salem	Do. do.	1,441 7 3	1,30,647 11 2	1,32,089 2 5	1,30,350 13 2	1,738 5 3
	Total ..	10,650 1 10	6,96,483 1 7	7,07,133 3 5	7,01,855 9 10	5,277 9 7

MADRAS,
7th July 1892.

(Signed) A. W. C. STANBROUGH,
Acting Examiner of Forest Accounts.

ANNUAL FORM No. 66.

Forest Department, Madras Presidency, Southern Circle.

Revenue received and Outstandings on account of revenue during 1891–92.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Direction	Timber and other produce ..	..	556 12 8	556 12 8	556 12 8	..	
Madura	Do. do. ..	2,574 4 5	64,540 3 8	67,114 8 1	65,051 0 8 (a) + 613 3 9	1,450 3 8	(a) Written off the accounts—*vide* Board's Proceedings, No. 513, dated 26th August 1891, and Board's Proceedings, No. 676, dated 27th November 1891.
Tinnevelly	Do. do. ..	1,736 0 0	84,846 14 9	86,582 14 9	84,717 8 1 (b) + 43 3 0	1,822 3 8	(b) Written off the accounts—*vide* Board's Proceedings, dated 18th January 1892, Forest Mis. No. 54, and Board's Proceedings, dated 9th July 1891, Forest Mis. No. 585.
North Coimbatore ..	Do. do. ..	4,530 9 3	1,18,481 6 2	1,23,011 15 5	1,21,906 10 1 (c) + 236 9 9	868 11 7	(c) Written off the accounts as per Board's Proceedings, No. 473, dated 26th August 1891.
South Coimbatore ..	Do. do. ..	1,289 0 8	96,056 5 0	97,345 5 8	96,944 4 4	401 1 4	
Nilgiris	Do. do. ..	103 5 3	47,786 8 5	47,889 13 8	47,845 13 5	44 0 3	
North Malabar	Do. do. ..	185 0 0	32,194 7 6	32,379 7 6	27,446 7 0	4,933 0 6	
South Malabar	Do. do. ..	175 0 0	60,790 2 8	60,965 2 8	60,965 2 8	..	
South Canara	Do. do. ..	2,728 12 0	46,778 0 5	49,506 12 5	48,245 14 6	1,260 13 11	
	Total ..	13,321 15 7	5,52,030 13 3	5,65,352 12 10	5,53,679 9 5 + 893 0 6	10,780 2 11	

MADRAS,
7th July 1892.

(Signed) A. W. C. STANBROUGH,
Agetin Examiner of Forest Accounts.

GRAND TOTAL for the Presidency.

Outstandings at commencement of year.	Value of sales and other revenues during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
29,066 13 4	1,687,621 2 7.	1,716,687 15 11	1,694,215 5 7 + (a) 1,226 14 6	21,245 11 10	(a) Written off the accounts.

ANNUAL FORM No. 68.

Forest Department, Madras Presidency.

TREES felled by Government Agency during the year 1891–92.

(Selection fellings.)

——	Teak.	Rosewood.	Vengai.	Sal.	Iron-wood.	Sandal-wood.	Eucalyptus and acacia.	Miscellaneous.	Total.
Northern Circle.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
Stock at beginning of the year	..	* 2	..	30	116	..	..	52	200
Ganjam	..	..	..	428	..	..	..	411	839
Vizagapatam	..	..	..	..	..	..	..	..	..
Godávari	..	..	..	..	..	..	..	70	70
Kistna	..	..	..	..	..	..	..	2,733	2,733
Anantapur	6	..	..	..	..	..	..	818	824
Bellary	..	..	..	..	..	..	..	2,002	2,002
Kurnool	..	..	..	..	..	..	..	..	..
Total felled during the year.	6	..	..	428	..	..	..	6,034	6,468
Total ..	6	2	..	458	116	..	..	6,086	6,668
Converted into logs, &c. ..	6	..	..	458	(*a*) 114	..	..	(*b*) 6,047	6,625
Balance on hand at end of the year	..	2	..	..	2	..	..	39	43
Central Circle.									
Stock at beginning of the year	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..
Cuddapah	..	..	..	..	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	..	2,979	2,979
South Arcot	..	..	..	..	..	..	..	8	8
Tanjore	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..
Salem	..	..	..	..	..	90	..	1,228	1,318
Total felled during the year	..	..	..	..	..	90	..	4,215	4,305
Total ..	..	..	..	..	..	90	..	4,215	4,305
Converted into logs, &c. ..	..	..	..	..	..	90	..	3,341	3,431
Balance on hand at end of the year	..	..	..	..	..	..	..	874	874
Southern Circle.									
Stock at beginning of the year.	15	11	20	..	..	..	..	233	279
Madura	4	8	54	..	..	..	..	338	404
Tinnevelly	..	..	..	..	..	..	..	..	..
North Coimbatore	..	..	..	..	..	..	..	..	..
South do.	226	1	2	..	..	..	..	477	706
Nilgiris	165	..	96	..	..	..	13,060	57	13,378
North Malabar	712	7	..	..	..	..	..	246	965
South do.	218	6	10	..	..	..	..	437	671
South Canara	2	6	20	..	..	..	..	97	125
Total felled during the year.	1,327	28	182	..	..	..	13,060	1,652	16,249
Total ..	1,342	39	202	..	..	..	13,060	1,885	16,528
Converted into logs, &c. ..	1,299	28	(*c*) 180	..	..	..	13,060	(*d*) 1,670	16,237
Balance on hand at end of the year	43	11	22	..	..	..	..	215	291
Total stock at beginning of the year	15	13	20	30	116	..	..	285	479
Total felled during the year	1,333	28	182	428	..	90	13,060	11,901	27,022
Total ..	1,348	41	202	458	116	90	13,060	12,186	27,501
Total converted into logs, &c.	1,305	28	180	458	114	90	13,060	11,058	26,293
Total balance on hand at end of the year	43	13	22	..	2	..	..	1,128	1,208

* Three in previous year's return was a mistake.

(*a*) Written off the accounts.

(*b*) Of this, 22 written off the accounts in Godávari.

(*c*) Includes 2 rejected as being useless.

(*d*) Includes 2 written off the accounts.

Annual Form No. 69.

Forest Department, Madras Presidency.

Statement of Timber and other produce cut and collected by Government Agency during the year 1891-92.

	Timber.								Fuel.	Bamboos.	Sandalwood.	Minor produce.
	Teak.	Rosewood.	Vengai.	Redwood.	Sál.	Iron wood.	Miscellaneous.	Total.				
Northern Circle.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Stock of the Circle at the beginning of the year ..	30,783	..	..	..	34,999	1,800	7,662	75,244	298,558	13,893	..	1,395
Ganjam	..	..	..	..	31,357	..	293	31,650	4,780	1,042	..	1,220
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..
Godávari	599	..	..	..	..	..	394	993	4,040	200	..	..
Kistna	..	..	..	..	..	..	1,050	1,050	79,674	4,215	..	279
Anantapur	..	..	..	..	..	..	1,159	1,159	400	220	..	54
Bellary	..	..	..	..	..	..	42	42	2,472	..	..	..
Kurnool	..	..	..	..	..	..	..	..	..	11,250	..	66,477
Collection during the year ..	599	..	..	..	31,357	..	2,938	34,894	91,366	16,927	..	68,030
Total ...	31,382	..	..	..	66,356	1,800	10,600	110,138	389,924	30,820	..	69,425
Sold locally in the forest ..	..	..	..	..	1,417	..	2,214	3,631	36,895	11,190	..	441
Used departmentally, wastage written off, &c.	1,845	..	..	..	1,773	690	985	5,293	722	4,535	..	5,185
Removed to sale depôts ..	15,290	..	..	..	41,668	524	5,439	62,921	15,300	1,042	..	1,274
Total disposal ..	17,135	..	..	..	44,858	1,214	8,638	71,845	52,917	16,767	..	6,900
Stock in the forest on 31st March 1892	14,247	..	..	..	21,498	586	1,962	38,293	337,007	14,053	..	62,525
Central Circle.												
Stock of the Circle at the beginning of the year ..	..	..	10	..	..	..	2,580	2,590	92,917	8,618	..	3,515
Nellore	..	..	..	..	..	..	931	931	284,978	..	..	10,925
Cuddapah	..	..	..	4,665	..	..	5,336	10,001	76,152	..	..	41,879
Chingleput	..	..	..	..	..	..	..	..	..	..	..	896
North Arcot	..	..	..	363	..	..	36,993	37,356	328,904	..	..	35,502
South Arcot	..	..	..	..	..	..	1,707	1,707	67,726	..	..	112
Tanjore	..	..	..	..	..	..	..	..	560	..	..	..
Trichinopoly	..	..	..	..	..	..	6	6	220,079	..	..	..
Salem	..	..	..	..	..	..	1,745	1,745	6,400	2,648	327	7,123
Collection during the year ..	..	..	..	5,028	..	..	46,718	51,746	984,799	2,648	327	96,437
Total ..	..	..	10	5,028	..	..	49,298	54,336	1,077,716	11,266	327	99,952
Sold locally in the forest ..	..	..	10	..	..	..	32,465	32,475	657,969	6,205	..	7,291
Used departmentally, wastage written off, &c.	..	..	..	91	..	..	806	897	12,934	2,413	..	828
Removed to sale depots ..	..	..	..	4,937	..	..	7,746	12,683	287,416	2,648	327	41,680
Total disposal ..	..	..	10	5,028	..	..	41,017	46,055	958,319	11,266	327	49,799
Stock in the forest on 31st March 1892	..	..	..	..	..	..	8,281	8,281	119,397	..	..	50,153
Southern Circle.												
Stock of the Circle at the beginning of the year ..	55,854	5,215	9,153	..	..	..	25,549	95,771	445,395	9,168	217	3,518
Stock not accounted for in previous year	10,522	370	2,420	..	..	..	17,298	30,610	..	..	..	..
Madura	210	390	1,329	..	..	..	1,424	3,353	47,639	3,059	..	..
Tinnevelly	9,948	..	..	..	..	..	5,798	15,746	267,002	..	..	86
North Coimbatore	..	..	..	..	..	..	630	630	..	750	3,730	..
South Coimbatore	15,477	53	80	..	..	..	28,005	43,615	28,489	975	..	3,346
Nilgiris	9,323	94	3,697	..	..	..	1,118	14,232	366,398	..	839	140
North Malabar	28,662	370	5,593	..	..	..	..	34,625	..	..	..	3
South Malabar	18,553	57	675	..	..	..	26,499	45,784	1,042	7,175	..	457
South Canara	758	521	319	..	..	..	13,929	15,527	18,997	818	..	15,866
Collection during the year ..	82,931	1,485	11,693	..	..	..	77,403	173,512	729,567	12,777	4,569	19,898
Total ..	149,307	7,070	23,266	..	..	..	120,250	299,893	1,174,962	21,945	4,786	23,416

Statement of Timber and other produce cut and collected by Government Agency &c.—*cont.*

	Timber.								Fuel.	Bamboos.	Sandalwood.	Minor produce.
	Teak.	Rosewood.	Vengai.	Redwood.	Sal.	Iron wood.	Miscellaneous.	Total.				
Southern Circle—cont.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Sold locally in the forest ..	69,884 (*) + 7,748	2,725	9,800	..	..	..	37,000	127,157	517,124	5,804	1,012	18,574
Used departmentally, wastage written off, &c. ..	4,830	77	..	..	..	..	5,224	10,131	117,143	240	30	141
Removed to sale depôts ..	30,666	629	389	..	..	..	21,277	52,961	184,245	7,725	3,693	34
Total disposal ..	113,128	3,431	10,189	..	..	..	63,501	190,249	818,512	13,769	4,735	18,74
Stock in the forest on 31st March 1892	36,179	3,639	13,077	..	..	..	56,749	109,644	356,450	8,176	51	4,667
	Grand Total.											
Stock of the Circles at the beginning of the year ..	(*a*) 86,637	5,215	(*b*)9,163	..	34,999	(*c*) 1,800	(*d*)35,791	173,605	836,870	31,679	217	8,428
Stock not accounted for in previous year's returns ..	10,522	370	2,420	..	..	..	17,298	30,610	..	..	..	..
Collection during the year..	83,530	1,485	11,693	5,028	31,357	..	127,059	260,152	1,805,732	32,352	4,896	184,365
Total ..	180,689	7,070	23,276	5,028	66,356	1,800	180,148	464,367	2,642,602	64,031	5,113	192,793
Sold locally in the forest ..	77,632	2,725	9,810	..	1,417	..	71,679	163,263	1,211,988	23,199	1,012	26,306
Used departmentally, wastage written off, &c. ..	6,675	77	..	91	1,773	690	7,015	16,321	130,799	7,188	30	6,154
Removed to sale depots ..	45,956	629	389	4,937	41,668	524	34,462	128,565	486,961	11,415	4,020	42,988
Total disposal ..	130,263	3,431	10,199	5,028	44,858	1,214	113,156	308,149	1,829,748	41,802	5,062	75,448
Stock in the forest on 31st March 1892	50,426	3,639	13,077	..	21,498	586	66,992	156,218	812,854	22,229	51	117,345

* Includes timber returned to Kutilamma and timber given away as commission.

(*a*) Includes 5,765 cubic feet of teak in Nilgiris included wrongly under Miscellaneous in 1890–91. Hence the difference between the closing balance of 1890–91 and the opening balance of 1891–92.

(*b*) Includes 6,333 cubic feet of Vengai classified wrongly under Miscellaneous in 1890–91.

(*c*) 562 Cubic feet was shown in excess in 1890–91 by mistake. Hence the difference.

(*d*) The difference of 12,098 cubic feet between the closing balance of 1890–91 and the opening balance of 1891–92 is due to the transfer of the same quantity to teak and vengai in 1891–92.

ANNUAL FORM No. 70.

Forest Department, Madras Presidency.

RECEIPTS and Issues of Timber and other produce in sale depôts during the year 1891–92.

	Timber.											
	Teak.	Rosewood.	Vengai.	Redwood.	Sal.	Iron wood.	Miscellaneous.	Total	Fuel.	Bamboos.	Sandalwood.	Minor produce.
Northern Circle.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Stock of the Circle at sale depôts at the beginning of the year	..	..	..	..	11,545	304	2,733	14,582	42,449	13,350	..	1,232
Ganjam	..	..	..	..	41,668	..	372	42,040	10,548	1,042	..	1,220
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..
Godávari	15,290	..	..	..	..	524	5,067	20,881	..	..	..	..
Kistna	..	..	..	..	..	..	..	..	4,752	..	..	..
Anantapur	..	..	..	..	..	..	..	..	..	..	..	54
Bellary	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool	..	..	..	..	..	..	..	..	..	..	..	..
Total received from forests into the sale depôts during the year	15,290	..	..	..	41,668	524	5,439	62,921	15,300	1,042	..	1,274
Receipts from one sale depôt into another	..	..	..	..	..	..	18	18	36,233	5,583	..	..
Quantity found in depôts in excess of original measurement in the forests	..	..	..	..	580	40	523	1,143	..	..	..	..
Total receipts, including previous year's stock	15,290	..	..	..	53,793	868	8,713	78,664	93,982	19,975	..	2,506
Sold from depôts	15,290	..	..	..	52,134	828	7,547	75,799	24,861	5,807	..	756
Removed from one sale depôt into another	..	..	..	..	..	..	18	18	36,233	5,583	..	..
Deduct excess by wrong measurement	..	..	..	..	..	..	..	..	15,989	..	..	..
Quantity used departmentally, wastage, written off, &c.	..	..	..	..	97	..	2	99	6,341	50	..	1,750
Total	15,290	..	..	..	52,231	828	7,567	75,916	83,424	11,440	..	2,506
Balance at the end of the year	..	..	..	..	1,562	40	1,146	2,748	10,558	8,535	..	..
Central Circle.												
Stock of the Circle at sale depôts at the beginning of the year	..	..	..	121,563	..	..	883	122,446	15,360	..	659	396
Nellore	..	..	..	..	..	..	..	..	195.513	..	..	680
Cuddapah	..	..	..	4,574	..	..	3,571	8,145	..	..	..	41,000
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	363	..	..	2,356	2,719	52,855	..	..	..
South Arcot	..	..	..	..	..	..	74	74	..	..	..	..
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	39,048	..	..	..
Salem	..	..	..	..	..	..	1,745	1,745	..	2,648	327	..
Total received from forests into the sale depôts during the year	..	..	..	4,937	..	..	7,746	12,683	287,416	2,648	327	41,680
Receipts from one sale depôt into another	..	..	..	..	..	..	..	..	1,955	..	..	..
Quantity found in depôts in excess of original measurement in forests.	..	..	..	44	..	..	26	70	248	..	..	39
Total receipts, including previous year's stock	..	..	..	126,544	..	..	8,655	135,199	304,979	2,648	986	42,115
Sold from depôts	..	..	..	49,018	..	..	7,144	56,162	252,292	2,648	835	1,487
Removed from one sale depôt into another	..	..	..	..	..	..	..	..	1,955	..	..	..
Quantity used departmentally, wastage, written off, &c.	..	..	..	..	..	..	699	699	26,790	..	..	68
Total	..	..	..	49,018	..	..	7,843	56,861	281,037	2,648	895	1,555
Balance at the end of the year	..	..	..	77,526	..	..	812	78,338	23,942	..	91	40,560

Receipts and Issues of Timber and other produce in sale depôts during the year 1891–92—*cont.*

—	Timber.								Fuel.	Bamboos.	Sandalwood.	Minor produce.
	Teak.	Rose wood.	Vengai.	Red wood.	Sal.	Iron wood.	Miscellaneous.	Total.				
Southern Circle.	C. FT.	C. FT.		C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	M. DS.
Stock of the circle at sale depots at the begining of the year	32,484	469	90	..	.	..	18,742	51,785	43,397	..	9	9
Madura	..	..	..	..	..	..	..	..	9,075	..	..	..
Tinnevelly	..	..	..	..	..	..	1,754	1,754	1,700	..	..	25
North Coimbatore ..	..	..	..	..	..	..	600	600	..	750	3,693	..
South do.	18,622	337	129	..	..	..	10,962	30,050	1,525	..	..	1
Nilgiris	..	..	..	..	..	..	723	723	1,70,903	..	..	..
North Malabar .. .	..	..	..	..	..	..	..	..	..	..	..	..
South do.	11,363	..	..	..	..	..	..	11,363	1,042	6,975	..	8
South Canara	681	292	260	..	..	..	7,238	8,471	..	..	..	..
Total received from forests into the sale depots during the year	30,666	629	389	..	..	.	21,277	52,961	1,84,245	7,725	3,693	34
By conversion	..	56	24	..	..	..	43	123	2,696	..	..	..
Receipts from one sale depot into another ..	..	..	..	..	..	..	..	..	..	..	..	..
Quantity found in depôts in excess of original measurements in forest.	31	..	..	..	..	..	24	55	340	..	230	..
Total receipts including previous year's stock ..	63,181	1,154	503	..	..	..	40,086	1,04,924	2,30,678	7,725	3,932	43
Sold from depots	43,829	1,066	196	..	..	..	27,368	72,459	1,80,381	6,975	2,235	26
By conversion	43		..	..	..	..	80	123	2,696	..	..	..
Removed form one sale depot into another ..	..	..	..	..	..	..	..	..	..	..	..	..
Quantity used departmentally, wastage, written off	1,193	88	77	..	..	..	3,648	5,006	139	..	11	1
Total ..	45,065	1,154	273	..	..	..	31,096	77,588	1,83,216	6,975	2,246	27
Balauce at end of the year	18,116	..	230	..	..	..	8,990	27,336	47,462	750	1,686	16

Grand Total.

Stock of the circles at sale depôts at the beginning of the year	32,484	(*a*) 469	90	121,563	11,545	304	(*a*) 22,358	188,813	101,206	13,350	668	1,637
Total received from forest into sale depôts during the year..	45,956	629	389	4,937	41,668	524	34,462	128,565	486,961	11,415	4,020	42,988
Collection by conversion..	..	56	24	..	..	..	43	123	2,696	..	..	..
Receipts from one sale depôt into another ..	..	..	..	..	..	..	18	18	38,188	5,583	..	..
Quantity found in excess of original measurements in forests ..	31	..	..	44	580	40	573	1,268	588	..	230	39
Total receipts including previous year's stock ..	78,471	1,154	503	126,544	53,793	868	57,454	318,787	629,639	30,348	4,918	44,662
Sold from depôts	59,119	1,066	196	49,018	52,134	828	42,059	(*b*)204,420	(*c*)457,534	15,430	3,130	2,269
Disposal by conversion ..	43	..	..	..	..	:	80	123	2,696	..	..	..
Removed from one sale depôt into another ..	..	..	..	..	..	..	18	18	38,188	5,583	..	..
Deduct excess by wrong measurement	..	..	..	..	..	..	..	..	15,989	..	..	..
Quantity used departmentally, wastage, written off, &c.	1,193	88	77	..	97	..	4,349	5,804	33,270	50	11	1,819
Total ..	60,355	1,154	273	49,018	52,231	828	46,506	210,365	547,677	21,063	3,141	4,088
Balance at end of the year	18,116	..	230	77,526	1,562	40	10,948	108,422	81,962	9,285	1,777	40,576

(*a*) The difference of 46 cubic feet between the closing balance of 1890–91 and the opening balance of 1891–92 is due to transfer of wood (ebony) classed under rosewood in Ganjam in 1890–91 to Miscellaneous in 1891–92.
(*b*) Includes 1,006 cubic feet of teak sold as fuel.
(*c*) Excludes 1,006 cubic feet of teak sold as fuel.

Annual Form No. 71.

Forest Department, Madras Presidency.

Sales of Timber and other produce cut and collected by Government Agency during the year 1891–92.

District.	Timber.														Total timber.			
	Teak.		Rosewood.		Vengai.		Redwood.		Sal.		Ironwood.		Miscellaneous.		From depôt.		From forest.	
	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	Quantity.	Amount.	Quantity.	Amount.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	RS.	C. FT.	RS.
Ganjam	..	..	..	..	..	..	..	..	52,134	1,417	..	..	2,141	..	54,275	13,537	1,417	586
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	20	..	20	23	..	..
Godávari	15,290	..	..	..	..	..	..	..	..	..	828	..	5,386	..	21,504	11,492	..	..
Kistna	..	..	..	..	..	..	..	..	..	..	..	..	..	1,050	..	..	1,050	66
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	..	1,164	..	..	1,164	116
Bellary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	15,290	..	..	..	..	..	..	..	52,134	1,417	828	..	7,547	2,214	75,799	25,052	3,631	768
Central Circle.																		
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	591	..	..	591	125
Cuddapah	..	..	..	..	..	..	23,080	..	..	..	..	..	2,944	403	26,024	6,289	403	98
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	25,938	..	..	..	..	..	2,356	30,088	28,294	3,333	30,088	5,711
South do.	..	..	..	..	..	10	..	..	..	..	..	..	..	1,343	..	..	1,353	279
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	40	..	..	40	2
Salem	..	..	..	..	..	..	..	..	..	..	..	..	1,844	..	1,844	1,535	..	..
Total	..	..	..	..	..	10	49,018	..	..	..	..	..	7,144	32,465	56,162	11,157	32,475	6,215
Southern Circle.																		
Direction	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	81
Madura	..	29	..	291	..	2,346	..	..	..	..	..	..	..	1,284	..	..	3,950	5,185
Tinnevelly	..	9,913	..	..	..	..	..	..	..	..	..	..	1,986	4,083	1,986	2,081	13,996	4,963
North Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..	270	30	270	70	30	8
South do.	17,611	6,002	746	..	137	..	..	..	..	..	..	..	21,150	515	39,644	32,055	6,517	6,605
Nilgiris	..	10,690	..	274	..	3,776	..	..	..	..	..	..	101	171	101	129	14,911	5,446
North Malabar	..	30,278 / † + 7,748	..	1,653	..	936	..	..	..	..	..	..	..	..	..	..	32,867 / † + 7,748	17,991
South do.	*24,955	12,972	..	409	..	2,736	..	..	..	..	..	..	..	25,539	24,955	24,094	41,656	20,945
South Canara	257	..	320	98	59	6	..	..	..	..	..	..	3,861	5,378	4,497	3,679	5,482	421
Total	*42,823	69,884 / † + 7,748	1,066	2,725	196	9,800	..	..	..	..	..	..	27,368	37,000	*71,453	62,099	119,409 / † + 7,748	61,645

* Excludes 1,006 cubic feet shown in Form 70 as the quantity has been sold as fuel and included in the latter head.

† Represents quantity returned to Kutilamma, her Pambrai forest timber, and quantity given away as commission.

Sales of Timber and other produce cut and collected by Government Agency during the year 1891–92—*cont.*

District.	Fuel.				Bamboos.				Sandalwood.				Minor produce.			
	From depôt.		From forest.		From depôt.		From forest.		From depôt.		From forest.		From depôt.		From forest.	
	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Northern Circle.	C. FT.	RS.	C. FT.	RS.	NO.	RS.	NO.	RS.	C. FT.	RS.	C. FT.	RS.	MDS.	RS.	MDS.	RS.
Ganjam	24,066	1,120	1,980	124	5,807	55	340	..	..	..	..	..	702	5	..	..
Vizagapatam	795	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Godávari	..	..	26,693	1,190	..	..	..	..	..	..	..	..	..	..	..	..
Kistna	..	..	4,594	174	..	..	..	..	..	..	..	..	..	..	108	24
Anantapur	..	..	640	14	..	..	100	5	..	..	..	..	54	141	..	..
Bellary	..	..	2,988	234	..	..	..	..	..	..	..	..	..	..	8	280
Kurnool	..	..	..	..	..	..	10,750	245	..	..	..	..	..	..	325	168
Total	24,861	1,140	36,895	1,736	5,807	55	11,190	250	..	..	..	..	756	146	441	472
Central Circle.																
Nellore	173,176	25,492	34,666	3,727	..	..	..	..	..	..	..	..	701	103	6,721	2,003
Cuddapah	..	..	93,664	5,411	..	..	6,205	52	..	..	..	..	786	327	470	218
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	39,036	7,822	276,049	19,772	..	..	..	..	..	..	..	..	..	..	100	8
South do.	..	..	49,080	5,215	..	..	..	..	3	19	..	..	..	..	..	..
Tanjore	..	..	560	98	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	40,080	3,786	197,550	13,045	..	..	..	..	..	..	..	..	..	..	..	..
Salem	..	..	6,490	320	2,648	116	..	..	892	7,872	..	..	..	..	..	..
Total	252,292	37,100	657,969	47,588	2,648	116	6,205	52	895	7,891	..	..	1,487	430	7,291	2,229
Southern Circle.																
Madura	11,573	723	41,930	4,172	..	..	1,456	179	..	..	..	..	..	..	..	..
Tinnevelly	1,700	50	260,771	6,065	..	..	..	..	..	..	..	..	18	26	249	399
North Coimbatore	..	..	..	..	..	..	..	..	2,235	20,751	..	..	..	..	..	..
South do.	6,918	1,390	31,500	722	..	..	975	63	..	..	..	..	1	160	3,244	11,636
Nilgiris	158,971	12,893	168,279	6,734	..	..	..	..	..	..	1,012	12,315	..	..	16	69
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	60
South do.	* 2,225	327	..	..	6,975	519	195	12	..	..	..	..	7	6	576	1,239
South Canara	..	..	14,644	1,409	..	..	3,178	66	..	..	..	..	..	..	14,478	28,179
Total	* 181,387	15,383	517,124	19,102	6,975	519	5,804	320	2,235	20,751	1,012	12,315	26	192	18,574	41,582

* Includes 1,006 cubic feet of teak shown in Form No. 70 and sold as fuel.

SALES of timber and other produce cut and collected by Government Agency, &c.—*cont.*

	Quantity sold.			Amount of sales.			Amount actually realized.
	From depôt.	From forest.	Total.	From depôt.	From forest.	Total.	
			Abstract.				
				Rs.	Rs.	Rs.	Rs.
Northern Circle.							
I (*a*) Timber .. .. C.ft.	75,799	3,631	79,430	25,052	768	25,820	26,242
(*b*) Fuel .. .. .. ,,	24,861	36,895	61,756	1,140	1,736	2,876	3,322
(*c*) Bamboo .. .. No.	5,807	11,190	16,997	55	250	305	240
(*d*) Sandalwood .. .. C.ft.	..	..	..	..	..	..	..
(*e*) Minor produce .. Mds.	756	441	1,197	146	472	618	618
Central Circle.							
I (*a*) Timber .. .. C.ft.	56,162	32,475	88,637	11,157	6,215	17,372	18,336
(*b*) Fuel .. .. .. ,,	252,292	657,969	910,261	37,100	47,588	84,688	90,700
(*c*) Bamboos .. .. No.	2,648	6,205	8,853	116	52	168	186
(*d*) Sandalwood .. .. C.ft.	895	..	895	7,891	..	7,891	7,891
(*e*) Minor produce .. Mds.	1,487	7,291	8,778	430	2,229	2,659	2,639
Southern Circle.							
I (*a*) Timber .. .. C.ft.	71,453	127,157	†198,610	62,099	61,645	1,23,744	1,20,841
(*b*) Fuel .. .. .. ,,	181,387	517,124	698,511	15,383	19,102	34,485	34,498
(*c*) Bamboos .. .. No.	6,975	5,804	12,779	519	320	839	839
(*d*) Sandalwood .. .. C.ft.	2,235	1,012	3,247	20,751	12,315	33,066	36,275
(*e*) Minor produce .. Mds.	26	18,574	18,600	192	41,582	41,774	41,535
			Grand Total.				
I (*a*) Timber .. .. C.ft.	*203,414	163,263	366,677	98,308	68,628	1,66,936	1,65,419
(*b*) Fuel .. .. .. ,,	†458,540	1,211,988	1,670,528	53,623	68,426	1,22,049	1,28,520
(*c*) Bamboos .. .. No.	15,430	23,199	38,629	690	622	1,312	1,265
(*d*) Sandalwood .. .. C.ft.	3,130	1,012	4,142	28,642	12,315	40,957	44,166
(*e*) Minor produce .. Mds.	2,269	26,306	28,575	768	44,283	45,051	44,792

Grand total of sales during the year both from forests and depôts	3,76,305	3,84,162
Add outstanding due from previous year as per Form No. 66..	15,313	
Total ..	3,91,618	
Deduct amount of outstandings written off	..	
Do. realized as per Form No. 64	3,84,162	
Balance outstanding on 31st March 1892 ..	7,456	

* Excludes 1,006 cubic feet of teak sold as fuel.

† Includes 7,748 c. ft. of timber returned to Kutilamma, her Pambrai forest timber, and quantity given away as commission.

† Includes 1,006 cubic feet of teak sold as fuel.

Annual Form No. 72-A.

Forest Department, Madras Presidency.

Timber and other produce cut, collected and removed by consumers or purchasers during 1891-92.

District.	Timber.	Firewood and charcoal.	Bamboos.	Money value of sales.											
				Timber.		Firewood and charcoal.		Bamboos.		Grazing and fodder grass.		Minor produce.		Total.	
				Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.
Northern Circle.	C. FEET.	C. FEET.	NO.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjam	70,634	722,290	1,832,800	4,905	4,905	8,867	8,867	4,466	4,466	131	131	1,839	1,839	20,208	20,208
Vizagapatam	54,518	263,012	429,458	1,802	1,802	5,645	5,645	4,706	4,706	108	108	2,753	2,753	15,014	15,014
Godávari	345,364	317,382	5,999,450	41,104	41,104	7,721	7,721	29,997	29,997	3,831	3,831	9,086	9,086	91,739	91,739
Kistna	439,738	871,907	435,300	27,138	27,138	12,313	12,313	1,928	1,928	41,926	43,479	22,410	21,746	1,05,715	1,06,604
Anantapur	27,474	124,840	11,737	3,652	3,652	2,512	2,512	236	236	1,806	1,806	17,135	17,117	25,341	25,323
Bellary	23,877	834,194	53,681	4,581	4,581	6,458	6,544	1,074	1,074	8,578	8,578	26,252	24,139	46,943	44,916
Kurnool	280,635	391,513	2,161,750	36,997	36,997	10,802	10,802	14,197	14,197	12,078	12,078	9,234	9,159	83,308	83,233
Total ..	1,242,240	3,525,138	10,924,176	1,20,179	1,20,179	54,318	54,404	56,604	56,604	68,458	70,011	88,709	85,839	3,88,268	3,87,037
Central Circle.															
Nellore	187,112	133,905	1,626	11,475	11,475	4,245	4,245	104	104	13,861	13,861	16,361	16,361	46,046	46,046
Cuddapah	381,212	1,575,877	205,370	13,034	13,204	23,598	23,599	5,272	5,272	11,629	11,629	41,035	40,998	94,568	94,702
Chingleput	22,317	119,498	1,969	2,444	2,444	6,715	6,715	125	125	909	909	21,412	21,412	31,605	31,605
North Arcot	22,092	890,810	9,139,700	12,509	12,509	25,615	25,622	29,622	29,622	13,525	13,525	40,417	40,417	1,21,688	1,21,695
South do.	64,272	1,308,032	..	7,802	7,754	23,960	23,960	4,886	4,886	4,094	4,094	36,916	36,916	77,658	77,610
Tanjore	18,385	184,286	105,825	1,328	1,328	4,433	4,433	660	660	649	649	3,947	3,983	11,017	11,053
Trichinopoly	202,703	996,425	658,524	14,471	14,471	15,734	15,685	4,307	4,307	5,345	5,162	25,148	24,234	65,005	63,859
Salem	230,117	652,173	9,621,360	18,864	18,864	22,153	21,717	21,904	21,904	10,121	10,121	42,355	42,207	1,15,397	1,14,813
Total ..	1,128,210	5,861,006	19,734,374	81,927	82,049	1,26,453	125,976	66,880	66,880	60,133	59,950	2,27,591	2,26,528	5,62,984	5,61,383
Southern Circle.															
Madura	113,843	36,579	..	7,122	7,861	5,176	4,426	1,824	1,824	1,383	1,383	37,624	37,459	53,129	52,953
Tinnevelly	21,187	1,192,529	..	5,893	5,893	44,996	44,198	537	537	1,817	2,158	14,046	14,413	67,289	67,199
North Coimbatore ..	62,271	326,146	..	11,432	11,432	8,198	8,198	10,236	10,236	37,032	37,032	27,596	27,812	94,494	94,710
South do.	21,880	716,180	..	4,869	4,875	11,365	11,365	4 896	4,896	9,324	9,324	8,058	8,058	38,512	38,518
Nilgiris	7,178	12,807	219,857	1,336	1,336	368	368	2,077	2,077	3,323	3,323	1,859	1,859	8,963	8,963
North Malabar	38,469	1,776	27,621	9,504	9,504	17	17	407	407	397	397	2,535	2,630	12,860	12,955
South Do.	35,016	261,526	59,831	4,614	4,614	5,046	5,046	965	965	144	144	593	593	11,362	11,362
South Canara	7,405	230,198	47,725	1,788	1,788	4,535	4,535	717	717	..	..	3,168	4,687	10,208	11,727
Total ..	307,249	2,777,741	355,034	46,558	47,303	79,701	78,153	21,659	21,659	53,420	53,761	95,479	97,511	2,96,817	2,98,387
Grand total ..	2,677,699	12,163,885	31,013,584	2,48,664	249,531	2,60,472	2,58,533	1,45,143	1,45,143	1,82,011	1,83,722	4,11,779	4,09,878	12,48,069	12,46,807
Add outstanding due from previous year as per Form No. 66														13,738	
Total ..														12,61,807	
Deduct amount of outstanding written off, &c.														1,226	
Do. realized during the year as per Form No. 64														12,46,807	
Balance outstanding on 31st March 1892 as per Form No. 66														13,774	

ANNUAL FORM No. 72-B.

Forest Department, Madras Presidency.

TIMBER and other Produce confiscated and sold during the year 1891–92.

District.	TIMBER.		FIREWOOD.		BAMBOOS.		Minor produce in value.	Total amount of sales.	Amount actually realized.
	Quantity in cubic feet.	Amount of sales.	Quantity in cubic feet.	Amount of sales.	Number.	Amount of sales.			
Northern Circle.		RS.		RS.		RS.	RS.	RS.	RS.
Ganjam	137	19	44	4	2,680	6	..	29	29
Vizagapatam ..	249	8	356	8	460	5	4	25	25
Godávari	8,952	4,601	1,367	51	56	1	..	4,653	4,653
Kistna	8,707	552	3,852	251	450	8	12	823	823
Anantapur	2,744	165	144	5	..	..	499	669	669
Bellary	..	..	195	54	164	3	81	138	138
Kurnool	11,247	2,367	665	117	3,120	79	167	2,730	2,730
Total ..	32,036	7,712	6,623	490	6,930	102	763	9,067	9,067
Central Circle.									
Nellore	748	89	97	4	..	..	..	93	93
Cuddapah	171	1,284	1,914	126	..	5	151	1,566	1,576
Chingleput	..	4	..	..	..	..	..	4	4
North Arcot ..	246	110	729	67	..	21	19	217	217
South do. ..	1,317	82	1,528	96	..	1	60	239	239
Tanjore	80	38	14	1	..	..	..	39	27
Trichinopoly ..	606	53	547	37	808	11	41	142	142
Salem	4,011	459	1,553	98	9,278	92	56	705	705
Total ..	7,179	2,119	6,382	429	10,086	130	327	3,005	3,003
Southern Circle.									
Madura	1,102	216	50	8	..	..	4	228	228
Tinnevelly	24	17	1,354	66	..	..	113	196	196
North Coimbatore ..	992	480	150	5	4,332	47	11	543	543
South do. ..	35	32	453	26	..	50	26	134	134
Nilgiris	21	13	21	5	..	..	9	27	27
North Malabar ..	..	..	80	3	..	..	..	3	3
South do. ..	65	7	27	1	..	..	2	10	10
South Canara ..	3,443	397	477	28	568	5	113	543	543
Total ..	5,682	1,162	2,612	142	4,900	102	278	1,684	1,684
Grand Total ..	44,897	10,993	15,617	1,061	21,916	334	1,368	13,756	13,754

	RS.
Add outstanding due from previous year as per Form No. 66	11
Total ..	13,767
Deduct amount realized during the year as per Form No. 66	13,754
Balance outstanding on 31st March 1892 ..	13

ANNUAL FORM No. 73-A.

Forest Department, Madras Presidency.

ABSTRACT showing the Value of Timber and other produce at sale depôts for the year 1891–92.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	Northern Circle.			Rs.			Rs.	Rs.	Rs.
Ganjam ..	Sal logs	1,076	10,930	4,098	224	1,462	548	..	3,550
	Do. sleepers	270	600	540	54	100	108	..	432
	Do. rafters	4	2	1	..	..	..	..	1
	Do. slabs	8,397	..	132	6,721	..	105	..	27
	Do. planks	25	13	1	..	..	..	..	1
	Ebony	3	46	21	..	..	..	..	21
	Miscellaneous	948	2,367	400	64	1,026	144	..	256
	Total Timber ..	..	13,958	5,193	..	2,588	905	..	4,288
	Firewood	..	41,654	1,050	..	5,806	181	..	869
	Bamboos	13,350	..	170	8,535	..	105	..	65
	Minor produce	Mds. 1,232	..	20	..	..	..	..	20
Vizagapatam ..	Ironwood	..	..	..	2	40	40	40	..
	Miscellaneous timber ..	..	..	..	6	120	120	120	..
	Total Timber ..	..	..	..	..	160	160	160	..
	Firewood	..	795	12	..	..	..	..	12
Godávari ..	Ironwood sleepers ..	228	304	456	..	..	..	..	456
	Miscellaneous	68	320	80	..	..	..	..	80
	Total Timber ..	..	624	536	..	..	..	..	536
Kistna	Firewood	..	..	..	..	4,752	72	72	..
	Central Circle.								
Nellore ..	Firewood	..	48	30	..	19,091	2,552	2,522	..
Cuddapah ..	Redwood roots and stumps.	Tons. 1,999	95,988	19,991	Tons. 1,613	77,526	15,327	..	4,664
	Miscellaneous	320	516	134	301	470	294	160	..
	Total Timber ..	..	96,504	20,125	..	77,996	15,621	..	4,504
	Minor produce	Mds. 396	..	117	Mds. 40,560	..	20,711	20,594	..
North Arcot ..	Redwood roots and stumps.	Tons. lb. 511 1,120	25,575	7,672	Tons. lb. ..	..	..	..	7,672
	Babul and casuarina wood.	166 1,331	11,144	551	25 909	1,715	128	..	423
South Arcot ..	Sandalwood roots ..	Tons. lb. 1 1,984	94	377	Tons. lb. 1 1,796	91	361	..	16
	Miscellaneous *	0 70	268	178	0 77	342	211	33	..
Trichinopoly ..	Firewood	..	4,168	395	..	3,136	260	..	135
Salem	Sandalwood	Mds. lb. 1,011 30	565	4,172	Mds. lb. 0 19	..	1	..	4,171
	Miscellaneous	No. 11	99	99	..	..	..	..	99

* Includes Vengai of 2 cubic feet shown in last year's report (Form No. 70).

Abstract showing the Value of Timber and other produce at sale depôts for the year 1891–92—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	Southern Circle.			Rs.			Rs.	Rs.	Rs.
Madura ..	Firewood	..	6,970	780	..	2,456	241	..	539
	Charcoal	...	72	* 10	..	2,218	186	176	..
Tinnevelly ..	Miscellaneous	63	245	184	2	12	12	..	172
	Minor produce	..	lb. 13	3	Mds. lb. 7 23	..	114	111	..
North Coimbatore.	Sandalwood billet and roots	..	9	45	Mds. lb. 3,776 4	1,686	1,645	1,600	..
	Miscellaneous	..	..	..	..	330	85	85	..
	Bamboos	..	..	..	750	..	10	10	..
South Coimbatore.	Teak	385	12,437	9,415	292	12,316	17,110	7,695	..
	Rosewood	7	409	265	..	..	..	..	265
	Red Sandars	1	90	74	2	106	106	32	..
	Miscellaneous	503	14,483	6,719	130	4,275	2,561	..	4,158
	Total Timber ..	..	27,419	16,473	424	16,697	19,777	3,304	..
	Firewood	Tons. lb. 384 838	26,136	3,072	..	20,743	1,779	..	1,293
	Minor produce	..	lb. 3	6	..	lb. 3	6	..	..
Nilgiris ..	Miscellaneous timber ..	150	150	187	346	374	466	279	..
	Firewood and charcoal ..	248	10,219	815	..	22,013	1,630	815	..
South Malabar.	Teak	22,788	20,021	19,000	1,513	5,419	1,500	..	17,500
	Miscellaneous timber ..	30	1,234	770	..	..	..	..	770
	Total Timber ..	..	21,255	19,770	1,513	5,419	1,500	..	18,270
	Fuel	..	209	6	..	32	2	..	4
	Minor produce	Mds. 8	..	7	Mds. 7½	..	5	..	2
South Canara..	Teak	2	26	42	21	381	621	579	..
	Rosewood	4	116	131	..	..	..	..	131
	Red Sandars	..	..	..	8	124	109	109	..
	Miscellaneous	415	2,574	2,517	164	3,999	3,278	761	..
	Total Timber ..	..	2,716	2,690	193	4,504	4,008	1,318	..

ABSTRACT.

Northern Circle.								
Timber	296	14,582	5,729	7,071	2,748	1,065	..	4,664
Firewood	..	42,449	1,062	..	10,558	253	..	809
Bamboos	13,350	..	170	8,535	..	105	..	65
Minor produce	Mds. 1,232	..	20	..	..	..	..	20
Central Circle.								
Timber	..	122,446	28,074	..	78,338	15,832	..	12,242
Sandalwood	..	659	4,549	..	91	362	..	4,187
Firewood	..	15,360	976	..	23,942	2,940	1,964	..
Minor produce	Mds. 396	..	117	Mds. 40,560	..	20,711	20,594	..

* Omitted to be shown in previous year's return.

Abstract showing the Value of Timber and other produce at sale depôts for the year 1891–92—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	Infavour of the year.	Against the year.
	ABSTRACT—*cont.*								
	Southern Circle.			Rs.			Rs.	Rs.	Rs.
	Timber	24,348	51,785	39,304	2,478	27,336	25,848	..	13,456
	Sandalwood	..	9	45	..	1,686	1,645	1,600	..
	Firewood	..	43,606	4,683	..	47,462	3,838	..	845
	Bamboos	..	..	..	750	..	10	10	..
	Minor produce	Mds. 9	..	16	16	..	125	109	..
	Grand Total.								
	Timber	..	188,813	73,107	9,549	108,422	42,745	..	30,362
	Sandalwood	..	668	4,594	..	1,777	2,007	..	2,587
	Firewood	..	* 101,415	6,721	..	81,962	7,031	310	..
	Bamboos	13,350	..	170	9,285	..	115	..	55
	Minor produce	Mds. 1,637	..	153	40,576	..	20,836	20,683	..

* Includes 209 cubic feet of firewood omitted in Form 70 of 1890–91 report but shown in 73-A of the same report.

ANNUAL FORM No. 73-B.

Forest Department, Madras Presidency.

ABSTRACT showing the Value of Live-stock, Stores, Tools and Plant for the year 1891–92.

Districts.	SURVEYING, &c., INSTRUMENTS				TOOLS				MACHINERY				FURNITURE			
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Northern Circle.		RS.		RS.		RS.		RS.		RS.		RS.		RS.		RS.
Direction	24	402	24	402	..	..	..	..	..	..	..	..	109	1,790	109	1,790
Ganjam	23	392	39	643	178	276	185	264	..	..	..	..	46	350	55	410
Vizagapatam	10	23	13	23	16	..	24	11	..	..	..	..	22	97	36	317
Godâvari	48	494	62	537	577	506	594	1,084	..	..	..	..	56	346	62	412
Kistna	50	597	51	625	315	361	389	480	..	..	..	..	45	357	59	461
Anantapur	47	227	59	281	86	166	91	325	..	..	..	..	57	342	56	328
Bellary	32	129	33	138	238	239	227	396	..	..	..	..	29	272	38	271
Kurnool	35	339	54	269	642	1,121	572	772	..	..	..	..	49	398	53	449
Total	269	2,603	335	2,918	2,052	2,669	2,082	3,332	..	..	..	..	413	3,952	468	4,438
Central Circle.																
Direction	9	36	19	249	..	..	..	..	..	..	..	..	42	130	51	186
Nellore	56	375	60	395	364	308	357	1,032	miles 8½	32,644	miles 7¼	32,644	56	388	73	414
Cuddapah	49	510	78	406	329	421	377	591	..	..	3½	13,967	87	550	83	637
Chingleput	20	334	24	382	222	510	289	644	..	..	..	..	42	430	44	446
North Arcot	34	740	21	639	939 cwt. 32·94	2,431	1,105	2,345	2	9,161	miles 2½ 38	11,620	103	500	116	554
South Arcot	73	1,274	75	1,325	703	434	734	459	7	271	7	271	206	1,592	162	1,495
Tanjore *	21	..	23	..	210	16	210	16	..	..	..	..	20	..	20	..
Trichinopoly	9	412	9	412	1,011	1,161	1,035	1,220	..	..	..	..	67	529	61	421
Salem	52	604	46	450	271	1,214	301	1,072	..	..	..	..	19	136	1	60
Total	323	4,285	355	4,258	4,049 cwt. 32·94	6,490	4,408	7,379	9 miles 8½	42,076	miles 13¼ 45	58,502	642	4,255	611	4,213

* Value not given for many articles.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1891–92–*cont.*

Districts.	Buildings.				Live-stock				Miscellaneous				Total					
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		Difference in value	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Northern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Direction	..	..	..	..	..	..	..	..	27	121	27	121	160	2,313	160	* 2,313	..	..
Ganjam	32	10,458	25	9,698	..	..	..	..	17	244	18	200	296	11,720	322	11,215	..	505
Vizagapatam	..	..	15	613	..	..	..	..	1	12	1	12	49	132	89	976	844	..
Godávari	24	3,483	26	4,261	4	6,000	1	1,500	161	3,367	140	2,364	870	14,196	885	10,158	..	4,038
Kistna	42	6,160	47	7,193	..	..	..	..	30	2,755	22	2,702	482	10,230	568	11,461	1,231	..
Anantapur	10	15,851	10	10,915	..	..	..	..	99	408	99	244	299	16,994	315	12,093	..	4,901
Bellary	5	1,580	4	1,315	..	..	..	..	25	317	23	108	329	2,537	325	2,228	..	309
Kurnool	38	17,712	50	19,861	..	..	..	..	17	88	16	75	781	19,658	745	21,426	1,768	..
Total ..	151	55,244	177	53,856	4	6,000	1	1,500	377	7,312	346	5,826	3,266	77,780	3,409	71,870	..	5,910
Central Circle.																		
Direction	..	..	..	..	..	..	..	..	..	..	19	40	51	166	89	475	309	..
Nellore	8	1,350	9	3,114	..	..	..	..	77	5,817	63	5,036	561 miles 8½	40,877	562 miles 7¼	42,635	1,758	..
Cuddapah	99	15,816	112	17,771	2	32	2	32	34	817	22	182	600	18,146	674 miles 3½	33,586	15,440	..
Chingleput	4	883	16	3,265	..	..	..	..	..	..	40	154	288	2,157	413 miles 2½	4,891	2,734	..
North Arcot	38	3,173	40	6,015	..	..	..	..	6	45	169	343	1,122 cwt. 32·94	16,050	1,489	21,516	5,466	..
South Arcot	12	4,097	12	6,136	..	..	..	..	422	1,348	480	1,544	1,423	9,016	1,470	11,230	2,214	..
Tanjore †	5	326	5	326	..	..	..	..	22	77	22	77	278	419	280	419	..	..
Trichinopoly	10	2,062	10	2,062	..	..	..	..	218	371	224	479	1,315	4,535	1,339	4,594	59	..
Salem	3	75	..	..	..	..	..	..	7	28	268	545	352	2,057	616	2,127	70	..
Total ..	179	27,782	204	38,689	2	32	2	32	786	8,503	1,307	8,400	5,990 miles 8½ cwt. 32·94	93,423	6,932 miles 13¼	1,21,473	28,050	..

* Taken as per last year's report. † Value not given for many articles.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1891–92—*cont.*

Districts.	Surveying, &c., Instruments				Tools				Machinery				Furniture.			
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Southern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Direction	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madura *	24	737	57	944	288	4,272	345	4,091	..	..	..	..	128	603	115	1,065
Tinnevelly	37	772	49	838	421	695	603	710	..	..	2	170	285	1,516	161	1,340
North Coimbatore *	25	82	25	77	903	1,092	473	35	..	..	..	..	273	199	156	74
South do. *	46	59	50	† 59	531	..	652	..	..	42,447	3,206	† 42,447	239	49	171	† 49
Nilgiris	37	321	31	285	807	1,565	681	1,172	4	1,900	4	1,820	71	623	64	575
North Malabar	13	340	37	515	44	159	65	400	..	..	..	..	4	26	..	..
South do.	10	322	10	322	734	460	809	555	17	106	17	106	37	149	44	225
South Canara *	36	..	36	63	435	785	496	940	..	..	..	..	106	603	84	245
Total ..	228	2,633	295	3,103	4,163	9,028	4,124	7,903	21	44,453	3,229	44,543	1,143	3,768	795	3,573
Grand Total ..	820	9,521	985	10,279	10,264 cwt. 32·91	18,187	10,614	18,614	30 miles 8½	86,529	3,874 miles 13¼	1,03,045	2,198	11,975	1,874	12,224

* A few articles have not been valued by the District Forest-officer.

† Taken as per last year's report.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1891–92—*cont.*

Districts.	Buildings				Live-stock				Miscellaneous				Total					
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		Difference in value	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Southern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Direction	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madura	91	13,616	78	15,261	6	135	..	..	..	..	154	636	537	19,363	749	21,997	2,634	..
Tinnevelly	77	9,575	76	8,811	..	..	..	..	..	..	144	356	820	12,558	1,035	12,225	..	333
North Coimbatore ..	42	7,746	42	7,846	..	..	..	..	..	..	146	90	1,243	9,119	842	8,122	..	997
South do.* ..	21	157	29	(†) 157	6	7,700	7	(†)7,700	47	..	316	..	890	50,412	4,431	50,412	..	..
Nilgiris	59	6,837	40	6,160	5	2,800	5	2,600	12	100	12	75	995	14,146	837	12,687	..	1,459
North Malabar ..	8	1,567	..	..	7	7,000	6	6,400	45	331	7	57	121	9,423	115	7,372	..	2,051
South do.	24	14,350	24	26,933	16	17,202	17	17,502	165	950	168	976	1,003	33,539	1,089	46,619	13,080	..
South Canara	20	170	20	..	..	..	..	..	236	..	212	305	833	1,558	848	1,553	..	5
Total ..	342	54,018	309	65,168	40	34,837	35	34,202	505	1,381	1,159	2,495	6,442	1,50,118	9,946	1,60,987	10,869	..
Grand Total ..	672	1,37,044	690	1,57,713	46	40,869	38	35,734	1,668	17,196	2,812	16,721	15,698 miles, 8⅓ cwt. 32·94	3,21,321	20,287 miles. 13¼	3,54,330	33,009	..

* Value not given.

† Taken as per last year's report.

ANNUAL FORM No. 74.

Forest Department, Madras Presidency.

STATEMENT of Live-stock during 1891-92.

PART I.

In possession of the reporting officers throughout the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep, including servants and food.				Remarks
Northern Circle.	*Elephants.*			RS.	A.	P.	
Godávari ..	1. Captain Gunning ..	July 1888	Per head ..	57	2	9	
	2. Pown Guz						
Southern Circle.							
South Coimbatore.	1. Sankara	28th June 1888. Arrived from North Malabar.	Do. ..	55	5	3	
	2. Chloe						
	3. Karthiyayani	August 1890. Arrived from South Malabar.					
	4. Rani	Purchased in May 1889 in South Malabar.					
North Malabar ..	1. Phyllis	Purchased in January 1878.	Do. ..	31	8	9	
	2. Peri	Captured in April 1889 ..					
	3. Kalyani	Purchased from Mr. Sanderson, Superintendent of Keddas, Mysore, in October 1889.					
South Malabar ..	1. Vixen	Transferred from Wynaad in 1882.	Do. ..	28	5	4	
	2. Peyru	Do. do. ..					
	3. Sampson	Purchased from Mr. Morgan in 1884.					
	4. Eva	Do. do. ..					
	5. Juno	Captured in February 1886.					
	6. Jupiter	Do. in January 1887.					
	7. Thebau	Do. in January 1886.					
	8. Mars	Do. in January 1887.					
	9. Maharaj	Transferred from Wynaad in 1888-89.					
	10. Jembu	Do. do. ..					
	11. Gordon	Captured in February 1889.					
	12. Eddy	Do. in February 1890.					
	13. Mary	Do. in March 1890 ..					
	14. Loo	Do. in April 1890 ..					
	15. Hercules	Do. in December 1890.					
Nilgiris	1. Lutchmi	Transferred from the Anamalais on the 30th January 1892.	Do. ..	14	12	3	
	2. Chinna Lutchmi ..						
	3. Mabu Baksh	Born in January 1885 ..					
	4. Akbar Baksh	Do. on 22nd February 1888.					
	5. Meenatchi	Do. on 9th April 1889 ..					
	Other Cattle.						
Madura ..	1. Two Kodaikánal bulls.	Purchased in 1885 ..	Do. ..	11	6	8	
	2. Two Navinipatti bulls.	Do. in 1886 ..					
	3. Two bulls for Gundanshola Depôt.	One purchased in 1889, and the second obtained by way of exchange for another bull given in lieu, giving Rs. 15 extra.					
North Malabar ..	1. Two bullocks ..	Purchased in May 1890 ..	Do. ..	8	13	1	

PART II.

Received during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep, including servants and food.		Remarks.
Northern Circle.	*Elephants.*			RS. A. P.	
Ganjam ..	Badamoti Guz	Transferred from the Godávari District	Per head ..	74 10 4	
	Jung Bahadur				
Southern Circle.					
South Coimbatore.	Chinna Rani	Received from South Malabar in August 1891.	Do. ..	53 10 7	
	Maud	Caught on 23rd July 1891.			
	Abdul	Do. 4th October 1891.			
North Malabar ..	Lallameah	Captured in March 1891.	Do.	31 8 9	
South Malabar ..	Parvathi	Transferred from South Coimbatore in August 1891.	Do. ..	29 6 0	
	Jessie	Captured in December 1891.	Do. ..	28 0 0	

PART III.

Gone off the list during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep, including servants and food.		How disposed of.
Southern Circle.	*Elephants.*			RS. A. P.	
South Coimbatore.	Juno	Captured in 1890–91.	..	..	Died.
North Malabar ..	Lakshmi	Transferred from Anamalai in May 1881.	..	17 0 0	Died on the 20th February 1892.
South Malabar ..	Jessie	Captured in January 1890.	..	21 8 0	Died on the 24th July 1891.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue (Land Revenue), dated 25th October 1892, Forest No. 588 :—

Read—file of letters from Collectors and Conservators forwarding the Progress Report of Forest Administration in the several districts and circles for 1891–92.

Resolution—dated 25th October 1892, Forest No. 588.

The Board resolves to submit to Government the Progress Report of Forest Administration in Madras Presidency for the year 1891–92.

2. Hitherto the Board has submitted with its remarks the detailed and consolidated reports of Conservators. This year a general report for the whole Presidency has been prepared in the Board's office from the various district reports received through the Conservators accompanied by their remarks.

3. The Board regrets the delay in submitting the report which is due chiefly to Collectors not having furnished complete information regarding settlement, demarcation and other matters which had to be supplemented by further calls from this office, the last reply having been received only on the 2nd September. It is hoped that Collectors will, in future, furnish complete information in their reports to enable the Board to submit the report on the due date. The accumulation of other work owing to the illness of the late Secretary and changes in the *personnel* of the Board's Forest-office have also somewhat contributed to the deley.

4. In future years, Conservators should take the same position in regard to administration reports as the Deputy Commissioners of the Salt and Abkári Department, *i.e.*, they should not only forward the district reports (corresponding to those of the Salt and Abkári Assistant Commissioners) with their remarks, but should each of them submit a separate report for his own circle dealing *briefly* with the administration of the circle as a whole, the important events of the year, the general progress of forest operations, and the work of individual District Forest-officers. The Board in the Separate Revenue Department derives much assistance from the division reports of its Deputy Commissioners, and desires to have the same aid in the Forest branch from Conservators.

(A true Extract.)

(Signed) W. S. MEYER,
Acting Secretary.

To the Secretary to Government, Revenue Department,
with 2 copies of the report.
,, all Conservators of Forests.
,, ,, Collectors.
,, the Examiner of Forest Accounts.

ORDER—dated 20th December 1892, No. 1277, Revenue.

Forest, No. 321.

With its Proceedings read above, the Board of Revenue submits its progress report of Forest administration in the Madras Presidency for the year 1891–92. There has again been a considerable delay in its despatch, which is not satisfactorily explained, and the Government must insist on greater punctuality being observed in future in the submission of this important report to Government.

2. The chief feature in the administration of the year was the re-organization of the upper controlling staff of the department which came into force on the 21st of

October 1891 and the effect of which has been to materially increase the number of officers. The revision of the subordinate establishment, which was sanctioned during the year by the local Government and is now under the consideration of the Government of India, is likely to be introduced during the current year. The want of additional officers has long been felt by the department and a marked improvement in administration may be looked for now that matters have been placed on a satisfactory footing in this respect. Under the re-organization of the superior staff above referred to, the number of circles and Conservators in the Presidency was increased during the year from two to three.

3. "*Areas and boundaries.*"—The following table shows in square miles the areas of the several classes of forests at the commencement and close of the year:—

CLASSES and areas of forests in square miles.

—	Area on 1st April 1891.	Added during the year 1891-92.	Excluded during the year 1891-92.	Area on 31st March 1892.	Net increase or decrease.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
A. Reserved forests	5,112	2,099	36	7,175	+ 2,063
B. Do. lands	11,435	387	2,418	9,404	— 2,031
C. Other forests	1,276	144	116	1,304	+ 28
Total ..	17,823	2,630	2,570	17,883	+ 60

The increase under reserved forests and the decrease under reserved lands are due to the fact that a considerable area of the latter was settled and transferred during the year to the head of the former. In reviewing the Administration report for 1890-91, the Government remarked on the absence of uniformity in the returns under C "*other forests*," and directed that the areas under control should be shown in future reports under "*Reserved forests*" and "*Reserved lands*" only. The Board has not, however, observed these instructions and explains that the areas exhibited under "*Other forests*" are not actually under the control of the department, but consist mainly of lands to be selected for future reservation. It is not clear why these areas which are not controlled by the department should find a place in the returns and they should be excluded in future reports.

4. The following statement shows in square miles the percentage of the area of forests under the control of the department to the extent of unoccupied land in each district at the close of the year under review:—

PERCENTAGE of area under control of the Forest department to area of unoccupied lands.

Names of districts.		Area under control of department.	Percentage to unoccupied area.	Names of districts.		Area under control of department.	Percentage to unoccupied area.
		SQ. MLS.				SQ. MLS.	
Northern Circle.	Ganjam	551	44·9	Central Circle—*cont.*	Tanjore	25	3·1
	Vizagapatam ..	96	5·9		Trichinopoly ..	246	23·6
	Godávari	1,016	43·8		Salem	1,289	38·3
	Kistna	668	28·5		Total ..	6,083	31·3
	Anantapur	354	13·2				
	Bellary	414	18·3				
	Kurnool	1,764	43·3				
	Total ..	4,863	29·4				
Central Circle.	Nellore	591	23·5	Southern Circle.	Madura	498	31·5
	Cuddapah	2,024	36·6		Tinnevelly ..	589	43·4
	Chingleput	195	18·0		Coimbatore ..	2,535	74·0
	North Arcot ..	912	36·6		Nilgiris	385	60·8
	South Arcot ..	801	30·7		Malabar	602	14·8
					South Canara ..	1,024	31·5
					Total ..	5,633	39·4
					Grand Total ..	16,579	32·9

NOTE.—This statement excludes "other forests."

The percentages are very low in many of the districts of the Northern and Central Circles, but the Board points out that, owing to want of time and paucity of officers, the selection of lands for further reservation has made little progress in the districts

concerned. The details furnished in paragraph 20 of the report show that the work of selection is well advanced in nearly all the districts above referred to, and, now that the strength of the department has been augmented under the re-organization, better progress may be expected.

5. "*Settlement.*"—The Board gives at paragraph 16 of its report a statement showing in detail the progress made in forest settlement operations during the two years 1890–91 and 1891–92. The total area gazetted as reserved forest during 1891–92 considerably exceeded that similarly notified in any previous year; the figures for the last five years are shown in the subjoined table:—

1887–88.	1888–89.	1889–90.	1890–91.	1891–92.
SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
715	404	307	1,374	2,063

Six hundred and seven blocks with an area of 7,384 square miles were pending settlement at the close of the year under review. Of these, 41 have since been constituted reserved forests, 155 were awaiting scrutiny in the Board's office, 70 had been returned to Collectors for revision and 341 were pending with Forest Settlement-officers in various stages of settlement. Appendix A to the Board's report shows the various causes of the delay in the settlement of these 341 blocks. It appears from the above appendix that only 11 blocks were awaiting settlement by Forest Settlement-officers of claims under inquiry and that the delay in the remaining cases was due to causes beyond the control of these officers. The abstract given at paragraph 21 of the report shows that the outturn of work by Forest Settlement-officers during the year was on the whole satisfactory. The Board has recently submitted a special report on the progress of forest settlement work during the five years ending with 1890–91. The general conclusion drawn from the above report, which was disposed of by Government in G.O., No. 4279, dated 3rd October 1892, is that there has been great delay in the conduct of settlement, a conclusion emphasized by the figures given in the abstract E at paragraph 16 of the Administration report now under review from which it is seen that nearly one half of the blocks pending settlement at the end of 1891–92 were notified under section 4 of the Act between the years 1884 and 1888. Making due allowance for retarding causes, the Government can only characterise as most unsatisfactory a rate of progress under which it takes 7 or 8 years to settle a single block. The Board has recently submitted proposals for the appointment of an additional Forest Settlement-officer to accelerate work in the districts of Ganjam and Vizagapatam, and the matter is under the consideration of Government. His Excellency the Governor in Council accepts the Board's assurance that every possible care is being taken to see that Forest Settlement-officers are kept fully employed and that no avoidable delay occurs in the submission of their reports.

6. "*Demarcation.*"—This subject is dealt with at length by the Board in paragraphs 25—29 of its report. The following table shows the outturn in miles for the past two years:—

Year.	Preliminary demarcation.	Permanent demarcation.
	MLS.	MLS.
1890–91	345	2,343
1891–92	1,864	2,429

The above figures do not include 173 miles of old demarcated boundary recleared during 1891–92. The figures under the head of "*Reclearing old lines*" given in the statement appended to paragraph 25 of the Administration report require some explanation. The length of old lines recleared up to 1891–92 is given as only 498 miles and the entries relate to only three districts, but it is observed that in paragraph 5 of the Administration report for 1890–91 it was stated that 782 miles of old lines were cleared in the Northern Circle in that year alone, and the details given at paragraph 19 of the Northern Circle Conservator's report for 1890–91 show that the figure 782

relates to no less than 8 districts. The Board should explain these discrepancies. The average cost per mile of the demarcation work completed up to the end of 1891–92 is given as Rs. 8–14–8 for preliminary and Rs. 12–1–2 for permanent demarcation, but these averages are only approximately correct as some of the entries under permanent demarcation have been wrongly made under that head; the Board should endeavour to secure more accuracy in future returns. The Government agrees with the Board that it is inadvisable to lay down fixed rules for forest demarcation and that general instructions will suffice. The importance of a secure and permanent demarcation of the State forest property appears to be fully realized by the Board and the progress which is being made in the work is on the whole satisfactory.

7. "*Surveys.*"—The following table shows the outturn of survey work by the Government of India Survey Party during the survey year ending with the 31st August 1892 and the three previous years :—

Year.	Outturn in square and linear miles.	Cost per mile.
		Rs.
1888–89	1,552	162
1889–90	1,795	149
1890–91	1,764	112
1891–92	2,107·5	97

The increase in outturn and decrease in average cost during the year under review is satisfactory. No figures are given in the report under the head of departmental surveys, but the Board says that very little and very inaccurate work was turned out during the year under review owing to the incompetency of the surveyors employed. The Board has issued instructions to the Conservators to replace the present surveyors by more competent men, and it is hoped that better progress will be made during the current year. Details of the area surveyed departmentally and of the cost of survey should be furnished in future reports.

8. "*Working plans.*"—The information given at paragraph 36 of the Administration report shows that little progress has, as yet, been made in the preparation and execution of scientific working plans. His Excellency the Governor in Council, while recognizing the necessity for drawing up such plans for those forests which have been or are likely to be regularly exploited, concurs in the Board's opinion that until the problems of completing settlement and enlisting and training competent subordinate establishments have been successfully solved it would be premature to insist on the preparation of schemes for working the forests on scientific principles.

9. *Forest offences.*—The Board has carefully analysed in paragraphs 39—43 of its report the statistics relating to offences against the Forest law. The following table compares for each circle (1) the number of cases for disposal, (2) the number disposed of, (3) the percentage of cases compounded to cases disposed of and (4) the percentage of acquittals to the number of cases dealt with by the magistracy.

STATEMENT of forest offences.

—		Number of cases for disposal.			Number of cases disposed of.				Percentage of cases compounded to cases disposed of.	Percentage of acquittals to cases dealt with by magistracy.
		Cases pending at the beginning of the year.	New cases.	Total.	Cases withdrawn.	Cases compounded.	Cases dealt with by magistracy.	Total.		
Northern Circle.	1890–91.	104	1,578	1,682	18	404	899	1,321	30·6	23·2
	1891–92.	349	2,010	2,349	3	595	1,293	1,891	31·5	23·3
Central do.	1890–91.	264	3,042	3,306	69	1,275	1,449	2,793	45·6	20·7
	1891–92.	513	4,723	5,236	244	2,338	1,766	4,348	53·3	23·5
Southern do.	1890–91.	95	957	1,652	34	375	469	878	42·7	17·0
	1891–92.	174	1,391	1,565	53	579	737	1,369	42·3	28·6
Total ..	1890–91.	463	5,577	6,040	121	2,054	2,817	4,992	41·1	20·8
	1891–92.	1,036	8,124	9,160	300	3,512	3,796	7,608	46·2	24·4

The large increase in the number of offences reported in 1891–92 is said to have been due to the failure of the rains which compelled the people in the affected districts to resort to the unauthorized lopping of branches for purposes of fodder. Referring to the statement given at paragraph 39 of the report, the Government fully endorses the remarks of the Board of Revenue on the subject of the high percentage of acquittals in the districts of Godávari, Nellore, Chingleput, Tanjore, Madura, Tinnevelly, North Coimbatore and North Malabar. The figures for these districts are most unsatisfactory and probably evidence, as the Board points out, the trumping up of charges by subordinates and neglect on the part of District Forest-officers to inquire into cases before directing the institution of prosecutions. His Excellency the Governor in Council cannot too strongly condemn any tendency to unnecessarily harass the people of the country by the application of the penal clauses of the Forest law, and desires that the Board will issue strict orders to the Collectors of the districts above mentioned with a view to remedying the unsatisfactory state of things which appears to exist. There has been a marked increase during the year particularly in the districts of Salem, North Arcot, Trichinopoly and North Malabar in the number of cases compounded and the amount realized in compensation fees has almost doubled as compared with 1890–91. The Board is unable to account for this large increase owing to the want of satisfactory explanations from the Collectors concerned. It would be instructive to know whether the power of compounding has been properly exercised and the Board should obtain and submit further information on the point. It should be borne in mind that the power of compounding should not be used in cases where the evidence is not sufficiently strong to secure convictions, but is intended to meet those cases where the offence is clear, but there are circumstances, such as the petty nature of the offence, ignorance of law on the part of the offender, or distance of the place of offence from a Magistrate's Court which render it inadvisable to institute a prosecution. The number of cases pending disposal at the close of the year was considerably larger than at the end of the previous year, but Collectors have not furnished sufficient information under this head to enable the Board to judge how far the delay in the disposal of cases was due to the officers of the department and how far to the magistracy. There is some inconsistency between the Board's statement, at paragraph 40 of the administration report, that the increase in the number of forest offences in Kistna was due to the fact that the people were compelled to resort to unauthorized lopping of branches for fodder, and the statement at paragraph 50 to the effect that ryots in Kistna were allowed, as a special case, to remove the leaves of certain fodder trees from the forests.

10. "*Forest fires and fire protection.*"—The following statement shows for the last five years the area attempted to be protected and the cost of protection per square mile :—

Year.	Area attempted to be protected (in square miles).	Cost in rupees per square mile.
1887–88	2,570	13·70
1888–89	3,169	10·81
1889–90	4,610	7·97
1890–91	4,928	8·41
1891–92	4,596	9·90

The fact that there has been an increase in cost in spite of a decrease in area during 1891–92, as compared with the previous year, is explained as being due to the inclusion in the figures of 1890–91 of certain areas which were not really protected and to the longer duration of drought during the year under review. The percentage of protected area visited by fire rose from 4·6 in 1890–91 to 6 in 1891–92; this increase is also accounted for by the abnormal dryness of the season.

11. "*Grazing.*"—There was again a considerable increase in the receipts from grazing fees, grazing contracts and sale of grass as shown below :—

Year.	By grazing per head.	By grazing contracts and sale of grass.	Total.
	RS.	RS.	RS.
1890-91	92,621	57,394	1.50,015
1891-92	1,15,794	67,928	1,83,722

The increase is explained by the bad season and the consequent admission of a comparatively large number of cattle to reserved grazing grounds. The incidence of revenue per head of cattle, which is given for 19 districts, varied from one anna in Chingleput to four annas and three pies in the Nilgiris. Statistics are for the first time given in this year's report regarding the area open to grazing in each district, but no reliable information has been furnished by Collectors as to the number of cattle grazed per acre in reserved forests open to grazing. The subject should be fully dealt with in the next administration report. The question of the extent to which browsing animals, more especially goats, are allowed to graze in reserved forests forms the subject of a separate report recently submitted by the Board and disposed of by Government in G.O., No. 4547, dated 18th October 1892. The statistics furnished on this point are not complete, but are sufficiently so to justify the Board's general conclusion that, considering the present state of forest organization in this Presidency, the existing restrictions on the grazing of sheep and goats are sufficient. The information given regarding the progress of departmental grass-cutting and hay-making is somewhat meagre, and the Board has, it is observed, called for a special report from Conservators on the former subject. The experiment of collecting hay departmentally for sale to the public was tried in seven districts but proved a complete failure, as there was no demand for the hay in spite of the dryness of the season and the consequent scarcity of fodder. The Board has rightly recognized the importance of this subject and directed Collectors to deal with it prominently in future reports.

12. "*Reproduction.*"—Natural reproduction appears to have been retarded in some districts owing to the prolonged drought and in others owing to reckless cutting and over-grazing. The results, generally, under this head were, however, encouraging and evidence the fact that continuous protection is, as a rule, all that is needed to ensure a good natural growth. The following table compares the statistics of plantations, topes and cultural operations for the last two years :—

STATISTICS of plantations and cultural operations.

	AREA IN ACRES.		COST IN RUPEES DURING THE YEAR	
	1890-91.	1891-92.	1890-91.	1891-92.
Northern Circle.				
Plantations	909	934	2,696	2,593
Topes	3,517	3,517	1,246	1,204
Cultural operations	412	422	2,559	1,688
Total ..	4,838	4,873	6,501	5,485
Central Circle.				
Plantations	12,676	13,426	18,601	21,563
Topes	7,909	10,486	4,284	4,661
Cultural operations	3,764 + Mls. 100	3,831 + Mls. 100	1,789	2,143
Total ..	24,349 + Mls. 100	27,743 + Mls. 100	24,674	28,367
Southern Circle.				
Plantations	6,275	6,399	18,511	12,622
Topes	14,363	14,522	4,436	2,287
Cultural operations	1,961	2,172	2,486	1,995
Total ..	22,599	23,093	25,433	16,904
Grand Total ..	51,786	55,709	56,608	50,756

It will be observed that the figures for the Southern Circle show an increase in area in 1891–92 accompanied by a marked decrease in expenditure. The same remark applies, though with less force, to the figures of the Northern Circle; the anomaly requires explanation. The result of the attempt made in 1890–91 to grow the *Acacia planifrons* in conjunction with agricultural crops is still in doubt as the plants are said to have suffered considerably from the heat of the sun, though they appear to have revived after the rains. The sowings were repeated during the year under review, but the plants are reported to have died. The experiment is said to have proved successful in Burma and a little perseverance should ensure a similar result in this Presidency. Comparatively little work was done during the year under review as regards improvement thinnings, the reason being, as the Board points out, that District Forest-officers are at present employed on settlement, selection, and other preliminary labour and have little time to devote to this important subject. The Government of India has already admitted the difficulty of carrying out improvement fellings on an extended scale until settlement and demarcation are further advanced, but has, at the same time, pointed out that it should be possible to gather information which will prove useful in the preparation of working plans by experimenting on selected areas. The Board promises not to lose sight of the instructions of the Government of India in this matter. The cultivation of the edible date was continued during the year with fairly good results, but it is too early as yet to form any conclusion as to the ultimate success of the experiment. No practical progress appears to have been made in inducing the people of this country to take up the cultivation themselves. It is satisfactory to learn that the cultivation of the mahogany has met with marked success in the Madura district.

13. "*Communications and Buildings.*"—The outlay on roads and buildings during the year under review was Rs. 72,497 as compared with Rs. 68,940 in 1890–91, the percentage of outlay to gross revenue being 4·2 as against 3·8 in the previous year. The Board draws attention to the fact that the outlay on buildings exceeded that on roads and that the proportion ought to be the other way. The question of limiting the expenditure on buildings and increasing the outlay on forest roads is receiving the Board's attention. In reviewing the forest report for 1890–91, the Government of India pointed out the desirability of developing forest roads according to some system instead of extending them at haphazard, and the Board should bear these instructions in mind when dealing with the question of increasing the outlay on roads.

14. *Tramways.*—The working of the Virinjipuram tramway in the North Arcot district has so far resulted in a loss owing to the fact that the quantity of timber transported over the line has been much less than it is capable of carrying. There can be no question that the actual cost of carriage per mile is much lower by tramway than by road, and it only requires a slight increase in the quantity of timber exploited to make the Virinjipuram tramway a success financially. Some information should have been furnished in the report on the working of the tramway in South Coimbatore.

15. "*Yield and Working.*"—The subjoined statement gives particulars of the yield of the forests during the last three years:—

COMPARATIVE statement of yield for the past three years.

—	Timber including sandalwood.	Fuel.	Bamboos in number.	Minor produce in rupees.
	C. FT.	C. FT.		
1889–90	3,537,473	13,219,507	12,694,181	5,37,631
1890–91	3,802,497	12,168,215	18,223,447	6,58,311
1891–92	3,086,937	13,987,173	31,148,005	6,40,842
Increase or decrease in 1891–92 as compared with 1890–91 ..	— 715,560	+ 1,818,958	+ 12,924,618	— 17,469

The variations are fully explained in paragraphs 75—82 of the report and call for no further comment. In paragraph 83 the Board deals with the question of the adequacy of the prices realized for timber and fuel. The Government specially referred to this

subject in last year's review and called for a separate report, which has now been furnished by the Conservators of the Central and Southern Circles. It seems clear from their reports that for the present, at any rate, any general enhancement of prices would be inadvisable. The extensive working of private forests has filled the market with cheap timber, while coal is entering every year more largely into competition with wood fuel and a general raising of prices under existing circumstances would certainly affect the demand and cause a loss of revenue. At the same time, as the Board points out, the seigniorage rates may safely be raised in particular instances on really good wood, cut in the forests for local requirements. The Government also agrees with the Board in considering that market prices and not seigniorage rates should invariably be charged in all cases where wood is obtained by contractors and others for business purposes.

16. *Comparative Cost of Departmental and Private Working.*—The Board compares in a tabular statement, subjoined to paragraph 84 of its report, the cost and net profit under Government and private working. A similar comparison was made by Government in its review of last year's administration report, but the method of calculation therein adopted was not quite the same, the main difference being that the whole cost of the permanent establishment was debited in equal proportions to the two systems. The Board points out that such an apportionment is incorrect as it makes no allowance for the share of establishment charges debitable to operations, such as construction of roads and buildings, demarcation, survey and settlement of reserves, and conservation of forest areas for climatic purposes. The Board considers that half the total charges under B. Establishments may be fairly debited to these operations, the remaining half being equally apportioned between departmental and private working and in this view the Government concurs. The results worked out by the Board, though interesting, seem to be of somewhat doubtful accuracy as the figures under departmental working show a loss in the case of fuel, bamboos and minor produce in curious contrast to a substantial profit under the head of timber and particularly sandalwood.

17. "*Financial Results.*"—The financial results of the year's working are compared below with those of 1890–91 :—

FINANCIAL results of the year's working as compared with those of the previous year.

	NORTHERN CIRCLE.		CENTRAL CIRCLE.		SOUTHERN CIRCLE.		TOTAL.	
	1890–91.	1891–92.	1890–91.	1891–92.	1890–91.	1891–92.	1890–91.	1891–92.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Receipts	4,80,462	4,38,680	7,72,141	7,01,855	5,42,805	5,53,680	17,95,408	16,94,215
Charges	2,96,882	2,70,151	3,95,972	4,63,929	5,60,430	5,49,849	12,53,284	12,83,929
Surplus or deficit ..	+ 1,83,580	+ 1,68,529	+ 3,76,169	+ 2,37,926	— 17,625	+ 3,331	+ 5,42,124	+ 4,10,286
Increase or decrease as compared with last year	— 15,051		— 1,38,243		+ 21,456		— 1,31,838.	

The receipts of the year under review, though less than those of 1890–91, are still considerably in excess of those of any previous year. The figures for the last five years are shown below :—

STATEMENT showing the amount of revenue and expenditure during the past five years.

	Receipts.	Charges.	Surplus.
	RS.	RS.	RS.
1887–88	13,74,920	11,18,212	2,56,708
1888–89	15,15,006	12,16,674	2,98,332
1889–90	15,57,627	11,65,358	3,92,269
1890–91	17,95,408	12,53,284	5,42,124
1891–92	16,94,215	12,83,929	4,10,286

The main causes of the fall in revenue during 1891–92, as compared with the previous year, appear to have been the unfavorable character of the season which was chiefly felt in the districts of North Arcot, Salem and Cuddapah, * and the use of Singareni coal in place of firewood on railways which caused a serious loss in Kurnool. The total receipts were less than the amount sanctioned in the revised estimate by Rs. 1,05,785, but the expenditure was also less than the budget figure and the net surplus for the year almost corresponded with the amount put down in the revised estimate. This is, considering the adverse season, certainly a good result.

* These three districts together lost nearly Rs. 89,000.

18. In conclusion, His Excellency the Governor in Council desires to express his thanks to the Board of Revenue for the complete and careful report which it has submitted on the year's administration and he observes with satisfaction that the forest work of the Presidency continues to show steady progress.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

To the Commissioners of Land Revenue.

Copy to the Commissioner of Revenue Settlement, Land Records and Agriculture.

,, ,, Accountant-General.

No. 1277A.

Copy to the Government of India, Revenue and Agricultural Department.

(Signed) C. A. GALTON,
Secretary to Government.

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ANNUAL

ADMINISTRATION REPORT

OF

THE FOREST DEPARTMENT

MADRAS PRESIDENCY,

FOR THE

FIFTEEN MONTHS ENDING 30TH JUNE 1893.

(1892-93.)

H H · K · 4 e

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

1893.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE MADRAS PRESIDENCY

FOR THE FIFTEEN MONTHS ENDING 30TH JUNE 1893.

CHAPTER I.

INTRODUCTORY.

The new Forest year.—Under the orders of the Government of India, a special forest year extending from 1st July to 30th June has been substituted for the official year hitherto adopted as the period for the submission of the Forest Administration Report. Accordingly this report embodies the transactions of the fifteen months from 1st April 1892 to 30th June 1893.

2. *Principal administrative changes.*—The principal administrative change during the year was the transfer of the audit of forest accounts from the Examiner of Forest Accounts to the Accountant-General, with effect from the 29th March 1893. Consequent on this change, a systematic inspection of the accounts of the District Forest-offices by the Local Fund inspecting staff of the Accountant-General's office has been ordered commencing from 1892–93, the pending audits of the accounts of previous years being ordered to be made by the Treasury Deputy Collectors with the aid (where necessary) of special accountants sanctioned temporarily for this purpose.

Rules under the Forest Act.—The revision of the rules under section 26 of the Forest Act engaged the attention of the Board during the period under report. A set of draft rules was drawn up and circulated to Conservators; their remarks have since been received and will be shortly considered.

3. *Visit of the Inspector-General of Forests.*—The Inspector-General of Forests to the Government of India paid a visit to this Presidency in March 1893 and conferred with the Board and Conservators on the forest policy of the Madras Government and the introduction of working plans in this Presidency.

4. *Tours of the Forest Member.*—The Board's Forest Member made tours of inspection to the Gódávari, Kistna, Kurnool, Anantapur, Coimbatore, Salem, Nilgiri, Madura, Trichinopoly and South Arcot districts, with the special object of enquiring into the progress of selection, settlement and demarcation of reserves.

5. *Conservators' inspections.*—The following abstract shows the names of the Conservators who held charge of the three Circles and the time spent in camp by each of them during the period under report:—

Circle.	Name of Conservator.	Number of days during which he held charge.	Number of days spent in camp.
Northern	Mr. Hooper	283	162
	Mr. Peet	173	93
Central	Mr. Popert	456	268
Southern	Mr. Cherry	456	317

The touring of these officers has generally been satisfactory.

The Board having noticed that the Conservators' inspections had not hitherto been made on any definite system, and that some districts were visited frequently while others were neglected, it was decided that each Conservator should spend not less than three months every half-year in camp and should visit every district in his charge during the year, making a detailed inspection of each district at least once in two years, and submitting half-yearly returns of his tours like Collectors.

During the period under report, Mr. Hooper visited all the districts in the Northern Circle except Ganjám, and submitted notes of his inspection for Vizagapatam, Bellary and Anantapur. Mr. Popert inspected all the districts in his Circle and submitted notes of his inspection for all except South Arcot. Mr. Cherry inspected and reported on the forests of all the districts in his charge except Tinnevelly.

Mr. Peet having been on deputation to attend the meeting of the Board of Control of the Dehra Dun Forest School for about a month, was not able to devote as much time to inspection as he might otherwise have done. He, however, conferred with the District Forest-officers of Ganjám, Anantapur, Kurnool, Vizagapatam, Gódávari and Kistna, though he was not able to make a detailed inspection of any of the districts in the Circle.

6. *Tours of District Forest-officers.*—The Board having noticed that District Forest-officers had not been spending as much time in camp as they ought, found it necessary to prescribe a minimum touring period of four months in every half-year (which has been relaxed, however, when exceptional circumstances seemed to render it expedient) and to call for half-yearly returns of the tours made by these officers. The more effective supervision which the Board has been exercising over the movements of District Forest-officers has produced satisfactory results.

Of the Forest-officers who during the fifteen months under review held charge of a district for three months and upwards, the undermentioned officers spent less than half their time in camp :—

	Percentage of time spent in camp.
Mr. H. H. Ward (Gódávari)	34·7
„ P. M. Lushington (Kurnool)	31·4
„ T. N. Hearsey (do.)	31·3
„ E. R. Murray (do.)	45·7
„ J. H. B. Brougham (Nellore)	49·5
„ Eber Hardie (North Malabar)	43·9

Of these, Messrs. Ward, Hearsey and Murray have submitted no explanation as to their short touring. The Board trusts that better results will be shown in the current year. Mr. P. M. Lushington's touring in Gódávari where he was subsequently transferred, was satisfactory. Mr. Brougham's shortcoming in this respect was animadverted upon in the previous year, but without any satisfactory improvement during the period under report. The attention of the Collector of Nellore is drawn to this point. Mr. Eber Hardie's short touring was due to ill-health.

The rules regarding the inspection of ranges by District Forest-officers twice in the year do not appear to have been universally observed. The attention of all Collectors will be drawn to this important matter.

7. *Reorganization of the Subordinate Staff.*—Further correspondence on this important subject occurred during the year, and the Board's final proposals in respect to the executive and clerical establishments were approved by the Madras Government in November 1892 and May 1893, respectively, and were submitted to the Government of India. The Secretary of State's sanction has, however, not yet been accorded, and forest work is everywhere hampered and delayed in consequence. The areas of the Government forests are daily increasing, but if the staff necessary to properly work them and to select, demarcate and map out new areas is not employed in time, the loss of revenue will undoubtly be serious; all the more so as Government has lately ruled that "Forests" can only be credited with the receipts from trees, &c., actually under the supervision of the department.

8. Of the 23 District Forest charges, twelve were in charge of Deputy Conservators, six in charge of Assistant Conservators and five in charge of Extra Assistant Conservators on the last day of the period under report.

CHAPTER II.

AREAS AND BOUNDARIES.

9. The following statement shows the areas of reserved forests and reserved lands at the commencement and at the close of the period under report :—

ABSTRACT A.—Classes and areas of forests in square miles.

Class of forests.	Area on 1st April 1892.*	Added during the year 1892–93 (from 1st April 1892 to 30th June 1893).	Excluded during the year 1892–93 (from 1st April 1892 to 30th June 1893).	Net increase or decrease.	Area on 30th June 1893.	Source or cause of increase or decrease.
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	
Reserved forests	2,202	1,054	2	+ 1,052	3,254	1,054 square miles transferred or added from reserved lands and 2 square miles deducted by rectification of areas.
Do. lands	2,661	703	1,067	— 364	2,297	662 square miles new areas, and 41 square miles by rectification of areas added; 9 square miles by rectification of areas, 4 square miles by exclusions at settlement and 1,054 square miles by transfer to reserved forests deducted.
Total ..	4,863	1,757	1,069	+ 688	5,551	
Central Circle.						
Reserved forests	2,430	1,277	..	+ 1,277	3,707	1,277 square miles transferred or added from reserved lands.
Do. lands	3,653	178	1,319	— 1,141	2,512	102 square miles new areas, 72 by rectification of areas and 4 at settlement added; 14 square miles by rectification of areas, 15 square miles by exclusion at settlement, 13 square miles by disafforestation and 1,277 square miles by transfer to reserved forests deducted.
Total ..	6,083	1,455	1,319	+ 136	6,219	
Southern Circle.						
Reserved forests	2,543	110	178	— 68	2,475	110 square miles transferred or added from reserved lands and 178 square miles deducted by rectification of areas.
Do. lands	3,090	194	342	— 148	2,942	190 square miles new areas, and 4 by rectification of areas added; 10 square miles by rectification of areas, 222 by disafforestation and 110 square miles by transfer to reserved forests deducted.
Total ..	5,633	304	520	— 216	5,417	
Total.						
Reserved forests	7,175	2,441	180	+ 2,261	9,436	
Do. lands	9,404	1,075	2,728	— 1,653	7,751	
Grand Total ..	16,579	3,516	2,908	+ 608	17,187	

* The areas exhibited in the last year's statement under "other forests" have now been omitted under the instructions of Government (paragraph 3 of its review of the Forest report for 1891–92) as not being under the control of the Department.

The increase in the area of reserved forests is mainly the result of the notification of large areas in Kistna, Bellary, Cuddapah, North and South Arcot and Salem. The decrease in the Southern Circle is nominal, being due to the rectification of the areas of reserved forests as ascertained by the Survey Department. The decrease under reserved lands is due to the transfer of 2,441 square miles to reserved forests, which was partly counterbalanced by the constitution of new areas as reserved lands mainly in Vizagapatam, Kistna, Kurnool and Madura.

10. The total area of each district and of the reserved forests and reserved lands therein is shown in the subjoined statement :—

Abstract B.—District areas and forest reserves in square miles.

Districts.	Total district area excluding feudatory and tributary states.	Area excluding zemindari and whole inam villages.	Cultivated area.	Particulars of remaining area in column 3.			Forests under the control of the Forest Department.			Percentage of column 10 to column 3.	Percentage of column 10 to 7.
				Uncultivated and forest areas.	Area for which returns are not available.	Total of columns 5 and 6.	Reserved forests under Act V of 1882.	Reserved lands.	Total of reserves, columns 8 and 9.		
1	2	3	4	5	6	7	8	9	10	11	12
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.		
Ganjám	8,369	4,079	582	1,260	2,237	3,497	114	453	567	13·9	16·2
Vizagapatam	17,242	1,373	234	232	907	1,139	24	279	303	22·0	26·6
Gódávari	7,865	3,823	1,524	1,831	468	2,299	442	572	1,014	26·5	44·1
Kistna	8,397	5,414	3,108	2,306	..	2,306	633	222	855	15·7	37·0
Anantapur	5,287	4,321	1,702	2,217	402	2,619	101	299	400	9·2	15·2
Bellary	5,900	4,586	2,422	2,164	..	2,164	214	292	506	11·0	23·3
Kurnool	7,514	5,924	1,854	4,070	..	4,070	1,726	180	1,906	32·1	46·8
Total ..	60,574	29,520	11,426	14,080	4,014	18,094	3,254	2,297	5,551	18·8	30·6
Central Circle.											
Nellore	8,765	4,045	1,559	2,394	92	2,486	341	248	589	14·5	23·7
Cuddapah	8,731	7,496	1,961	5,535	..	5,535	965	1,102	2,067	27·5	37·3
Chingleput	2,840	2,051	896	1,155	..	1,155	155	57	212	10·3	18·3
North Arcot	7,497	3,768	1,179	2,589	..	2,589	688	308	996	26·4	38·4
South Arcot	5,211	4,726	2,233	2,417	76	2,493	385	417	802	16·9	32·1
Tanjore	3,709	2,485	1,717	768	..	768	16	8	24	·9	3·1
Trichinopoly	3,631	2,683	1,635	894	154	1,048	190	49	239	8·9	22·8
Salem	7,471	5,330	1,969	3,361	..	3,361	967	323	1,290	24·2	38·3
Total ..	47,855	32,584	13,149	19,113	322	19,435	3,707	2,512	6,219	19·0	31·9
Southern Circle.											
Madura	8,808	3,196	1,516	1,252	428	1,680	479	158	637	19·9	37·9
Tinnevelly	5,384	3,508	2,286	1,222	..	1,222	410	1	411	11·7	33·6
Coimbatore	7,860	7,167	3,727	3,250	190	3,440	1,063	1,272	2,335	32·5	67·8
Nilgiris	957	957	325	632	..	632	233	175	408	42·6	64·5
Malabar	5,589	5,565	1,475	4,090	..	4,090	190	412	602	10·8	14·7
South Canara	3,902	3,883	634	3,249	..	3,249	100	924	1,024	26·3	31·5
Total ..	32,500	24,276	9,963	13,695	618	14,313	2,475	2,942	5,417	22·3	37·8
Grand Total ..	* 140,929	* 86,380	34,538	46,888	4,954	51,842	9,436	7,751	17,187	19·9	33·1

* These are the revised figures furnished by the Settlement Department.

It will be observed from the above statement that the area of forests under the control of the Forest Department in this Presidency is 33·1 * per cent. of that still at the disposal of Government and 19·9 * per cent. of the total area of Government lands including the cultivated area; and is fairly distributed among the three Circles, though it varies largely in the different districts. It is particularly large in Coimbatore and the Nilgiris; but very small in Tanjore, Malabar, Anantapur, Ganjám and Chingleput. The *Nilgiris* is essentially a forest district. The reservation of large blocks in the Kollegal, Satyamangalam and Bhaváni taluks in *North Coimbatore* and in the Anamalais and in the Bolampatti valley in *South Coimbatore* has contributed to the high percentage. As observed in the report of the previous year, the area available for reservation in *Tanjore* is very insignificant. The same is the case with *Malabar* and the non-Agency parts of *Ganjám*. The survey of the *Anantapur* district not being completed, some difficulty has been experienced in the selection of reserves in that district. When the reserves are completely selected and notified, the area of forests under control will be largely increased. In *Chingleput*, owing to the unsuitability of the greater portion of the waste land for forest purposes, the total extent available for reservation has been fixed at about 281 square miles, of which 212 square miles have already been brought under control, and steps are being taken to bring the remainder under reservation.

* The larger percentage given in last year's report included "other forests" now omitted—*vide* foot-note to statement in paragraph 9.

11. The subjoined statement shows the areas finally constituted into reserved forests in the fifteen months under report as compared with that in the year preceding:—

ABSTRACT C.—Reserved Forests in square miles.

Districts.	Prior to 1891–92.	During 1891–92.	During 1892–93 from 1st April 1892 to 30th June 1893.	Total.
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Ganjám	85	29	..	114
Vizagapatam	4	10	10	24
Gódávari	345	73	24	442
Kistna	346	106	181	633
Anantapur	14	17	70	101
Bellary	77	28	109	214
Kurnool	242	826	658	1,726
Total ..	1,113	1,089	1,052	3,254
Central Circle.				
Nellore	169	94	78	341
Cuddapah	356	58	551	965
Chingleput	126	20	9	155
North Arcot	430	83	175	688
South Arcot	148	16	221	385
Tanjore	9	..	7	16
Trichinopoly	141	18	31	190
Salem	684	78	205	967
Total ..	2,063	367	1,277	3,707
Southern Circle.				
Madura	379	88	12	479
Tinnevelly	428	139	— 157†	410
North Coimbatore	119	366	12	497
South Coimbatore	566	..	..	566
Nilgiris ..	201	6	26	233
North Malabar	119	..	32	151
South Malabar	39	..	..	39
South Canara	85	8	7	100
Total ..	1,936	607	— 68	2,475
Grand Total ..	5,112	2,063	2,261	9,436

† Twenty-one square miles were added to the reserved forests, but 178 square miles had to be deducted in consequence of rectification of areas due to survey map measurements.

The period under review shows a great increase of reservation (as compared with 1891–92) in the Central Circle where large areas were notified in Cuddapah, North and South Arcot and Salem.

Leaving out of account the deduction on account of rectification of area, the actual increase to the area of reserved forests in the Southern Circle is 110 square miles against 607 in the previous year. The decrease in progress occurred mainly in the Madura, Tinnevelly and North Coimbatore districts. In *Madura* only a small area remained to be finally notified at the beginning of the period under report and most of the blocks notified under section 4 during the period were not notified under section 16 before its close. In *Tinnevelly* there was only one block under settlement at the end of the previous year, which was finally notified during the period under report, and no new blocks were placed under settlement. In *North Coimbatore*, certain large blocks were constituted reserved forests in the previous year, while only small blocks were dealt with in the period under review.

12. The statement prescribed by the Government of India to show the progress made in forest settlement is given below :—

ABSTRACT D.

Circle.	Area of reserved lands—*vide* abstract A above.					Area brought under Chapter II of the Madras Forest Act.				
	On 1st April 1892.	Added during 1892–93 (from 1st April 1892 to 30th June 1893).	Total.	Excluded during the year (mainly by reason of constitution as reserved forests).	Balance at the end of the year.	Area notified under section 4 on the 1st April 1892.	Added during 1892–93 (from 1st April 1892 to 30th June 1893).	Total.	Notified under section 16 during 1892–93.	Balance notified under section 4 but not settled.
	SQ. MS.	SQ. MS.	SQ. MS.	SQ. MS.	SQ. MS.	SQ. MS.	SQ. MS.	SQ. MS.	SQ. MS.	SQ. MS.
Northern ..	2,661	703	3,364	1,067	2,297	2,583	573	3,156	1,052	2,104
Central ..	3,653	178	3,831	1,319	2,512	3,110	383	3,493	1,277	2,216
Southern ..	3,090	194	3,284	342	2,942	* 1,512	182	1,694	110 †—178	1,762
Total ..	‡ 9,404	1,075	10,479	2,728	7,751	7,205	1,138	8,343	2,261	6,082

* The balance at the end of 1891–92, as shown in the report for that year, is 1,691 square miles. The difference between that figure and this is due to the rectification of the areas of certain blocks

† This deduction represents the decrease due to the revised estimate of the areas of certain blocks notified in previous years.

‡ The balance at the end of 1891–92, as shown in the report for that year, was 10,708 square miles. The difference between that figure and this is due to the exclusion of "other forests."

The progress, it will be observed, is satisfactory, as the area under settlement at the close of the period under report is smaller than that at its beginning, notwithstanding the fact that a larger area was brought under settlement during that period than in the twelve months preceding it.

13. The statement in appendix A shows the area of lands under settlement and the area finally notified in each district during the period under report as compared with those in the twelve months preceding it, as well as the particulars of the area under settlement on the 30th June 1893.

14. The number of blocks pending settlement at the close of the preceding year was 604 covering an area (as now ascertained) of 7,205 square miles; to these were added during the period under report 358 blocks with an area of 1,138 square miles, making a total of 962 blocks having an area of 8,343 square miles. Of these 287 blocks with an area of 2,261 square miles were notified under section 16, leaving a balance of 675 blocks with an area of

(A) Notified under section 4 as per statement in appendix A, columns 2 to 5 :—

	Number of blocks.	Area.
		SQ. MS.
Up to 1891–92	1,392	13,961
During „	130	419
Total ...	1,522	14,380

(B) Notified under section 16 as per statement in appendix A, columns 10 to 13—

	Number of blocks.	Area. SQ. MS.
Up to 1891-92	712	5,112
During „	206	2,063
Total	918	7,175
Balance (A)—(B) ...	604	7,205

6,082 square miles at its close. Of these blocks, 95 (735 square miles) were notified under section 16 during the period under report, though their reservation took effect subsequent to its close; and 36 blocks (384 square miles) were pending scrutiny in the Board's office. The reports of 55 blocks (1,198 square miles) had been returned to Collectors for revision and 131 blocks (2,140 square miles) have been settled, but have not been reported on. The remaining 358 blocks (1,625 square miles) were pending with Forest Settlement-officers in various stages of settlement. More than half the total number of pending blocks were, it will be seen, notified under section 4 only during the period under report. It is gratifying to note that some of the oldest blocks in Nellore, Cuddapah, Kistna, Kurnool, Bellary and Salem were notified during the period. This, the Board has no doubt, is mainly due to the careful scrutiny which the weekly and monthly reports of the Forest Settlement-officers have undergone in the Board's office, and to recent consolidation and amendment of the rules regarding forest settlement, by which the procedure in regard to the preparation of maps to accompany notifications has been considerably simplified; as also to the fact that the Forest Settlement-officers have been ordered to assist the District Forest-officers, as far as possible, in the preparation of maps and boundary descriptions for which several of these blocks were waiting. Nevertheless there are still several blocks which have been pending for more than six years, mainly in Ganjám, Bellary, Anantapur, Nellore, Cuddapah and North Malabar. Reports for some of the long-pending blocks in *Ganjám* were received in the Board's office, but had to be returned as the Conservator reported that the settlement work had not been properly done in the Goomsur division. The sketch-maps originally submitted for these having been found to be useless, it is reported that fresh ones are under preparation. Most of the oldest blocks in *Bellary* are those pending with the Deputy Collector, Adóni division, who as a Revenue Divisional officer has not had sufficient time to devote to this work. The Board is now getting fortnightly reports of the progress made by this officer with a view to see that there is no avoidable delay on his part. The Collector of *Anantapur* will be requested to take early steps to get the long-pending blocks in his district notified. The old blocks pending in *Cuddapah* are mostly awaiting the preparation of correct sketch-maps, while those in *Nellore* and *North Malabar* are pending decision of appeals in the District Courts against Forest Settlement-officer's decisions. The general reason for the delay in the case of the blocks that have been long pending and which are mostly in unsurveyed tracts is that the maps submitted with the initial notifications under section 4 are found to be useless for the purpose of the final notifications and fresh maps have to be prepared, entailing a detailed survey of the boundary lines. This, under the recent orders which provide for the preparation of accurate maps at the outset, will not occur in the case of the blocks now being notified.

15. Compared with the year preceding, the total number of blocks not finally constituted reserved forests shows an increase, but their aggregate area shows a falling off, as will be seen from the following table:—

Year.	Settled and reported on but not finally notified.		Under settlement.		Total.	
	Number.	Area.	Number.	Area.	Number.	Area.
		SQ. MS.		SQ. MS.		SQ. MS.
1891-92	266	3,613	341	3,771	(a) 607	(a) 7,384
1892-93	186	2,317	489	3,765	675	6,082
Difference ..	— 80	— 1,296	+ 148	— 6	+ 68	— 1,302

(a) These are the figures given in the Administration Report for 1891-92. They are reported to be incorrect. The correct figures as now reported by collectors are 604 blocks and 7,205 square miles.

A statement showing the cause of delay in the case of these blocks will be found in appendix B.

16. *Selections for further reservation.*—Considerable progress is being made in the selection of lands for reservation. The Board has been getting monthly returns of the progress made in this respect which are scrutinised and reviewed in its office. The area brought under settlement during the fifteen months under report was 1,138 square miles against 419 in the preceding 12 months. There is still, however, much to be done, mainly in Kistna, Anantapur, Bellary and Kurnool in the Northern Circle and in Nellore, Cuddapah, Chingleput and Trichinopoly in the Central Circle. In North Arcot and Salem, the selections have been completed; but the areas could not be notified owing to want of maps. The Conservator, Central Circle, is of opinion that to insist on the submission of accurate maps with the initial notification would result in retarding the progress of selection and settlement, and thinks that rough sketch-maps would answer the purpose. This argument has been examined and refuted by the Board in its Proceedings, dated 29th August 1893, Forest No. 623, in reply to a similar remark made by the Government of India in reviewing the Administration Report for 1891–92, and its views have received the concurrence of Government. In the Nilgiris, the only work to be done consists in bringing under settlement the village forests which have been already selected. In South Canara, the Collector estimates that the work will take three years more, as there are yet 200 square miles to be selected and preliminarily demarcated.

17. The subjoined statement shows the work turned out by the Special Forest Settlement-officers during the period under review:—

ABSTRACT E.—Outturn of work by Special Forest Settlement-officers during 1892–93.

Name of Special Forest Settlement-officer.	Districts.	Issue of proclamation after notification under section 4.		Settlement of claims.		Report after settlement submitted.		Final notification proclaimed.		Cost.
		Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	
1	2	3	4	5	6	7	8	9	10	11
			SQ. M.		SQ. M.		SQ. M.		SQ. M.	RS.
*M.R.Ry. D. Jagannadha Row up to 10th June 1892 and Mr. J. T. Lever from 6th August 1892.	Gódávari	..	..	18	180	16	167	7	84	11,136
	Kistna	34	58	8	33	..	..	7	184	
	Kurnool	16	136	..	..	..	..	..	..	
	Total ..	50	194	26	213	16	167	14	268	11,136
M.R.Ry. C. Somasundara Sastri and M.R.Ry. S. Vencataramdos Naidu, the latter from 21st September to 24th December 1892.	Anantapur	5	9	18	151	24	177	17	81	13,375
	Bellary .. .	22	61	14	109	17	94	26	109	
	Nellore	..	..	2	70	..	..	9	75	
	Total ..	27	70	34	330	41	271	52	265	13,375
Mr. W. C. McMurray ..	Cuddapah	18	96	15	34	51	284	70	684	14,520
	North Arcot	15	67	4	32	18	210	22	213	
	South Arcot	9	6	1	·3	..	..	..	..	
	Salem	..	..	2	15	15	118	22	197	
	Total ..	42	169	22	81·3	84	612	114	1,094	14,520
M.R.Ry. C. Raju Sastri ..	South Arcot	48	150	1	9	7	17	16	72	13,818
	Tanjore	..	..	..	..	..	..	1	3	
	Trichinopoly ..	..	..	..	..	..	..	2	11	
	Madura	83	150	37	53	20	22	3	11	
	Tinnevelly	..	..	..	..	..	..	..	..	
	Coimbatore	3	20	6	5	30	227	44	312	
	Total ..	134	320	44	67	57	266	66	409	13,818
	Grand Total ..	253	753	126	691·3	198	1,316	246	2,036	52,849
	In 1891–92	95	896	166	1,702	122	1,518	164	2,765	44,116

* M.R.Ry. D. Jagannadha Row's work has not been separately reported.

Judged by the area of blocks in which claims were settled during the period under report, M.R.Ry. C. Somasundara Sastri has done the largest amount of work, though for about three months and-a-half he was absent on other duty in the Board's office and his *locum tenens* did very little during his absence. Taking into consideration the area of blocks for which reports were submitted, Mr. McMurray has done the largest amount of work; but it must be remembered that most of the blocks in Cuddapah reported on during the year had been practically settled in previous years and were merely awaiting the preparation of sketch-maps and boundary descriptions. An explanation called from and submitted by Mr. Lever with reference to his very poor outturn is now under the Board's consideration. Compared with the work turned out in the twelve months preceding the period under report, there has been a general falling off in the total area settled and reported on by the Special Forest Settlement-officers, but it must be remembered that the figures of 1891–92 included the areas of certain large blocks in Kurnool and Coimbatore notified in that year. Application was made for the appointment of a Special Forest Settlement-officer for the Ganjám and Vizagapatam districts, where settlement work is now in a very backward state; but the proposal was negatived by the Secretary of State.

18. The subjoined statement shows the work turned out by Revenue Divisional officers who were entrusted with forest settlement work :—

ABSTRACT F.

District.	Name of officer.	Blocks pending with Forest Settlement-officers at the beginning of 1892–93.		Added during 1892–93.		Total.		Disposed of during 1892–93.		Blocks pending with Forest Settlement-officers at the end of 1892–93 (from 1st April 1892 to 30th June 1893).	
		Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
			SQ. M.		SQ. M.		SQ. M.		SQ. M.		SQ. M.
Ganjám ..	Principal Assistant Collector	9	6	..	..	9	6	..	..	9	6
	Senior Assistant Collector ..	3	22	14	10	17	32	..	..	17	32
	General Deputy Collector, Goomsur	16	327	8	81	24	408	1	4	23	403
	Total ..	28	355	22	91	50	446	1	4	49	441
Gódávari ..	Sub-Collector (*a*)	1	8	..	..	1	8	1	8	..	..
	Special Assistant Collector (*a*)	2	182	..	..	2	182	..	..	2	182
	Total ..	3	190	..	..	3	190	1	8	2	182
Vizagapatam ..	Principal Assistant Collector	3	52	4	4	7	56	3	30	4	26
	Head Assistant Collector ..	7	30	9	203	16	233	4	10	12	223
	Total ..	10	82	13	207	23	289	7	40	16	249
Bellary	Deputy Collector, Adóni (*a*).	8	31	..	..	8	31	2	6	6	25
Chingleput ..	Mr. Pinto	41	30	44	17	85	47	24	15	61	32
Nilgiris ..	Head Assistant Collector ..	15	79	8	16	23	95	11	10	12	85
Coimbatore ..	Head Assistant Collector ..	..	..	4	8	4	8	..	..	4	8
Malabar ..	Sub-Collector	1	40	..	..	1	40	..	..	1	40
	Special Assistant Collector.	14	200	..	..	14	200	..	(*b*) 29	14	171
	Deputy Collector, Wynaad.	5	160	..	..	5	160	(*d*) 2	(*c*) ..	3	160
	Total ..	20	400	..	..	20	400	2	29	18	371
South Canara ..	Head Assistant Collector ..	6	9	1	(*c*) ..	7	9	6	8	1	1
	General Duty Deputy Collector	2	35	..	..	2	35	..	(*b*) 6	2	29
	Total ..	8	44	1	..	9	44	6	14	3	30

(*a*) This was omitted in the report for 1891–92.
(*b*) Rectification of area.
(*c*) The area being less than a square mile has been omitted.
(*d*) Unreserved or abandoned.

The results in the first two districts are very poor, but so long as Divisional-officers, with their multifarious duties, are entrusted with this important work, delay and errors are almost unavoidable. In the Nilgiris, on the other hand, the work done by Mr. H. V. Cobb, I.C.S., is satisfactory and deserves special mention.

19. The area of reserved lands not brought under settlement is shown in Appendix C.

The areas not yet brought under settlement are considerable in Kistna, Bellary, Cuddapah, Salem, North Coimbatore, Nilgiris and South Canara. The whole of the balance shown against *Kistna* was constituted into reserved lands only during the period under report. The Collector should take early steps to have it notified for settlement. In *Cuddapah* and *North Coimbatore*, the areas awaiting notification under section 4 of the Act are less than the corresponding areas in the preceding year; but in *Bellary*, *Salem*, and *South Canara* they are substantially the same as in the preceding year. The Collector of *Bellary* has furnished no explanation for this want of progress. The Collectors of *Salem* and *South Canara* state that the necessary steps are being taken to get notifications out. The area outstanding in the *Nilgiris* represents the Mudumalai leased forest and the Toda-patta lands which it is not intended to bring under settlement.

20. *Demarcation.*—The subjoined statement shows the length of boundaries preliminarily and permanently demarcated up to and during the period under report and the total and average cost:—

Abstract G.—Demarcation work done during 1892–93.

—	Preliminary.						Permanent.						Total expenditure upon demarcation to end of 1892–93.
	To end of 1891–92.		Average cost per mile during 1891–92.	During 1892–93.		Average cost per mile.	To end of 1891–92.		Average cost per mile during 1891–92.	During 1892–93.		Average cost per mile.	
	Miles.	Cost.		Miles.	Cost.		Miles.	Cost.		Miles.	Cost.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Northern Circle.		Rs.	Rs. A. P.		Rs.	Rs. A. P.		Rs.	Rs. A. P.		Rs.	Rs. A. P.	Rs.
Ganjám	(a) 22	62	..	14	84	6 0 0	899	13,338	7 13 1	31	209	6 11 10	13,693
Vizagapatam	23	47	2 0 8	84	87	1 0 7	55	302	9 8 5	46	501	10 14 3	937
Gódávari	498	2,541	3 4 8	62	514	8 4 8	655	7,813	0 10 0	35	298	8 8 3	11,166
Kistna	5	57	..	204	1,594	7 13 0	(b) 550	10,680	7 1 9	7	99	14 2 3	12,430
Anantapur	32	90	2 9 4	3	50	16 10 8	655	9,205	10 0 0	(c) 15	1,690	(c) 112 10 8	11,035
Bellary	40	71	0 3 2	62	36	0 9 3	338	3,129	29 5 4	134	1,160	8 10 6	4,396
Kurnool	(a) 752	11,518	7 0 11	230	554	2 6 6	..	..	..	14	160	11 6 10	12,232
Tota.	1,372	14,386	5 5 7	659	2,919	4 6 10	3,152	44,467	4 7 10	282	4,117	14 9 7	65,889
Central Circle.													
Nellore	(a) 252	1,081	..	..	..	..	(a) 802	5,974	5 14 11	87	548	6 4 9	7,603
Cuddapah	(b) ..	..	..	69	84	1 3 6	(b) 1,129	21,953	11 11 11	238	(d) 4,696	19 11 8	26,733
Chingleput	..	189	..	110	493	4 7 9	404	10,932	32 9 7	82	1,146	13 15 7	12,760
North Arcot	(a) 402	3,792	9 8 3	28	392	14 0 0	(a) 772	9,837	14 7 5	763	13,978	18 5 1	27,999
South do.	446	996	2 3 11	404	995	2 7 5	292	1,626	4 14 4	227	1,768	7 12 7	5,385
Tanjore	142	124	0 13 11	181	87	0 7 8	..	(a) 200	..	38	208	5 7 7	619
Trichinopoly	324	868	9 7 4	149	1,524	10 3 8	101	914	..	113	1,155	10 3 6	4,461
Salem	430	199	..	234	389	1 10 7	1,850	19,304	62 7 10	219	2,237	10 3 5	22,129
Total	1,996	7,249	5 8 1	1,175	3,964	3 6 0	5,350	70,740	16 1 7	1,767	25,736	14 9 0	1,07,689
Southern Circle.													
Madura	..	..	..	..	..	..	1,418	19,815	18 13 1	78	2,166	27 12 4	21,981
Tinnevelly	(b) 6	570	..	11	53	4 13 1	(b) 931	10,123	27 12 7	494	6,094	12 5 5	16,840
North Coimbatore	(a) 701	5,772	6 8 1	84	1,288	15 5 4	(a) 229	2,080	11 3 1	70	933	13 5 3	10,073
South do.	..	..	..	15	85	5 10 8	364	7,219	21 8 3	53	1,923	36 4 6	9,227
Nilgiris	..	..	..	..	..	..	941	21,778	233 13 4	16	1,774	110 14 0	23,552
North Malabar	31	139	..	8	40	5 0 0	256	3,028	20 13 4	40	1,321	33 0 5	4,528
South do.	(b) 50	163	..	11	136	12 5 10	(b) 34	570	6 12 0	..	..	..	869
South Canara	617	619	0 14 4	664	410	0 9 11	193	3,444	27 5 1	37	835	22 9 1	5,308
Total	1,405	7,263	5 12 7	793	2,012	2 8 7	4,366	68,057	20 2 8	788	15,046	19 1 6	92,378
Grand Total	4,773	28,898	5 8 4	2,627	8,895	3 6 2	12,868	1,83,264	14 11 4	2,837	44,899	15 13 3	2,65,956

(a) The difference between these and the closing balances of 1891–92 as per Administration Report for that year have not been explained by Collectors.
(b) Previous year's figures were incorrect. (c) Stone walls were erected as a famine work; hence excessive cost. (d) Includes money spent on stone walls constructed as famine relief works.

21. *Preliminary demarcation—Progress up to the end of June* 1893.—The length of boundary preliminarily demarcated in each district up to the 30th June 1893 is shown below:—

	MLS.		MLS.
Ganjám	36	Trichinopoly	473
Vizagapatam	107	Salem	664
Gódávari	560	Madura	...
Kistna	209	Tinnevelly	17
Anantapur	35	North Coimbatore ...	785
Bellary	102	South do.	15
Kurnool	982	Nilgiris	...
Nellore	252	North Malabar	39
Cuddapah	69	South do.	61
Chingleput	110	South Canara	1,281
North Arcot	430		
South do.	850	Total ...	7,400
Tanjore	323		

The outturn in the marginally-noted districts up to 30th June 1893 was very small; while in Madura and Nilgiris no work at all was done. In all these districts the practice prior to 1891 was to demarcate blocks permanently even before they were finally constituted reserved forests.

Ganjám.
Vizagapatam.
Anantapur.
Bellary.
Cuddapah.
Chingleput.
Tinnevelly.
South Coimbatore.
North Malabar
South do.

Work done during the fifteen months under report.—In Ganjám, Vizagapatam, Gódávari, Coimbatore, Malabar and Madura the area of forests for further reservation was small; and hence the small outturn of work during the period under review in the first five districts, and the absence of any work in the last. The short work in Anantapur and Cuddapah and the absence of any work in Nellore during the period have not been explained. In Bellary the short work is attributed to insufficiency of establishment. In North Arcot and Nilgiris, blocks have been permanently demarcated at the outset, as no alterations of boundaries are expected to be made at settlement. In Tinnevelly the surveyed fields being generally adopted as boundaries, the necessity for preliminary demarcation on a large scale did not arise.

The cost per mile of preliminary demarcation is high in Anantapur, North Arcot, North Coimbatore and South Malabar. In the first three districts the rates of 1892–93 are, moreover, higher than in the previous year. In South Malabar 7 miles of boundary had to be cleared in the ghaut reserves, where the cost of the work was excessive. The other Collectors have not reported the cause of the high rates. The omission should be supplied.

22. *Permanent demarcation.*—The length of boundary permanently demarcated up to 30th June 1893 in each district was as follows:—

	MLS.		MLS.
Ganjám	930	Trichinopoly	214
Vizagapatam	101	Salem	2,069
Gódavári	690	Madura	1,496
Kistna	557	Tinnevelly	1,425
Anantapur	670	North Coimbatore ...	299
Bellary	472	South do.	417
Kurnool	14	Nilgiris	957
Nellore	889	North Malabar	296
Cuddapah	1,367	South do.	34
Chingleput	486	South Canara	230
North Arcot	1,535		
South do.	519	Total ...	15,705
Tanjore	38		

The outturn of work up to 30th June 1893 is very small in Vizagapatam, Kurnool, Tanjore and South Malabar; but in all these districts except Kurnool, the area of reserved forests is also small. In Kurnool no permanent demarcation was done previous to the period under report and then only one block was permanently demarcated. In Anantapur and Cuddapah stone walls were constructed round certain reserves as famine works during the period under report; but in the latter district, the length and cost of this work have not been separately reported. The small outturn during the period in Gódávari and Nilgiris is due to the fact that almost all

the reserved forests had been permanently demarcated in previous years. In South Malabar no work was done during the period under report, as there were no reserved forests remaining to be permanently demarcated.

The Board is now getting monthly returns of the preliminary and permanent demarcation done in each district, and will see that arrears, wherever they exist, are brought up as soon as possible.

The cost of permanent demarcation is extraordinarily heavy in the Nilgiris. But if the cost of renewing old pillars (Rs. 1,402), which is included in this item is excluded, the rate per mile comes to about Rs. 23. Compared with the previous year, the rates are very much higher in Gódávari, Kistna, Cuddapah, North Arcot, Madura, South Coimbatore and North Malabar. The increase in Gódávari is due to the fact that the work done in 1891–92 consisted merely of fencing and ditching, while in the period under report, the cost of erecting boundary marks and of line-clearing has been included; and in Kistna to the fact that the work done in 1891–92 consisted merely of the erection of boundary marks, without line-clearing, over a portion of the boundary. In Cuddapah the expenditure during the period under report includes the cost of erecting stone walls which has not been separately reported. In North Arcot it is said that part of the work formerly done by the Sub-Assistant Conservator was found to be faulty, and had to be done over again. The increase in Madura has not been explained. In South Coimbatore and North Malabar the amount expended during the period under review included the cost of widening and reclearing old lines the length of which has not been included in the outturn. In Bellary, Salem and Tinnevelly the decrease in the rate has not been explained. In Chingleput it is due to the disuse of ditches on either side of the line.

In South Arcot and South Malabar the system of allowing the contractors employed in demarcation to take the clearings in lieu of money has been introduced; and in the former district the uprooting of stumps in the lines cleared was insisted on to avoid reclearing in future years. The latter measure should be introduced in other districts, and the introduction of the former considered. In North Malabar the length of demarcated boundary now reported is stated to be incorrect. The matter should receive the Collector's attention, and the correct figures should be ascertained and reported in the next return.

The total amount spent on both kinds of demarcation during the period under report amounted to Rs. 53,794. In addition to this, a large sum was spent on reclearing old lines and replacing boundary marks in several districts (notably in Madura) which has not been shown in the statement.

CHAPTER III.

Surveys and Working Plans.

23. The Survey of India Party worked during the period under review in South Coimbatore, Madura, Salem and North Arcot. In *South Coimbatore* the survey of the Anamalai hills, which had been commenced in the previous season, was completed and the large groups of forests in the western part of the Coimbatore taluk, the Tekadi leased forests and several other reserves were surveyed. In *Madura* triangulation was extended over the north-east and northern parts of the district, while topographical operations were begun in the south, in the neighbourhood of Madura itself, and subsequently followed the course taken by the triangulation party. The survey of the upper Palni plateau still remains to be done in that district, and this will be undertaken in the current year. In *Salem* triangulation was extended over the north-eastern part of the district and into some of the adjoining tracts of North and South Arcot. The actual survey included all the reserved forests on the Shevaroy Hills and some others in the Salem taluk. The operations in *North Arcot* were confined to the preliminary triangulation commenced in the western part of the district and carried in an easterly and southerly direction to connect it with that brought up from Salem. Boundary traversing was not carried out to any great extent during the season, partly for the reason that there was a fair amount in reserve from the work of previous years in the Salem district, and partly in consequence of the forest boundaries in Madura and South Coimbatore having been already determined to a considerable extent by the Madras Revenue Survey Department.

The following table shows by districts the areas completed during the survey year 1892–93 under the different descriptions of survey, as also the total outturn. The computing connected with the area surveyed has been brought up to date :—

Districts.	Triangulation.	Traversing.	Topography.
	SQ. MILES.	LR. MILES.	SQ. MILES.
Madura	482	..	147
South Coimbatore	..	13	402
Salem	1,650	126	239
North Arcot	1,298	..	..
Total .. { 1892–93 ..	3,430	139	788
Total .. { 1891–92 ..	1,196	252½	659

The above table shows a very large increase in the area triangulated as compared with the previous year, and though the traversing is less, the topography is 129 square miles more. The outturn is the highest hitherto attained. This is due partly to increased establishment and greater experience on the part of the surveyors, but mainly to a less amount of bad weather (owing to the partial failure of the north-east monsoon) and to the better health of the men.

With the increase in the area, there is a corresponding decrease in the cost rate of the final survey as will be seen from the following table :—

Year.	Topography completed.	Cost rate per square mile.
	SQ. MLS.	RS.
1888–89	168	162
1889–90	214	149
1890–91	* 465	112
1891–92	659	97
1892–93	788	78
Total ...	2,294	...

The total cost of the survey including the cost of instruments was Rs. 78,477 for the financial and Rs. 81,840 for the survey year, of which 25 per cent. has to be borne by the Government of India. Maps for 2,279 square miles have been prepared, of which maps for 1,506 square miles have been published, those for the remainder, which was all surveyed between 1st July 1892 and 30th June 1893, are awaiting publication in the Survey of India office, Calcutta.

24. The Survey work undertaken departmentally has not been satisfactory. Every endeavour to procure better men has failed. The Board has, however, quite recently made arrangements with the Superintendent, Madras Survey, to have Foresters trained in survey work and as this is given effect to, the difficulty of getting efficient men will, it is hoped, no longer be felt. The present paucity of establishment stands, however, in the way of the deputation of men on any large scale. The work turned out by the temporary surveyors employed in the several districts was mainly in connection with the selection and settlement of reserves.

The following is an abstract of the information furnished by Collectors as regards the amount of work turned out by the departmental surveyors and draughtsmen in each district :—

Ganjám.—Four blocks to be proposed for reservation were surveyed.

Vizagapatam.—Thirty-four and three-quarter miles of traverse, and 276 acres of area survey and 100 acres of topographical survey were carried out.

Gódávari.—Four thousand two hundred acres in 12 blocks were surveyed and 60 maps prepared.

Kistna.—Maps were prepared for 46 blocks covering an area of 73 square miles, and 110 miles of boundary were surveyed.

Anantapur.—The work turned out by the first surveyor was so bad that it had to be done over again. The present man is employed in surveying new blocks to be proposed for reservation.

Bellary.—One reserved forest and several of the proposed reserves were surveyed.

* NOTE.—The figure entered in the last Administration Report (440) is reported to be wrong.

Kurnool.—One hundred and fifteen square miles were surveyed. The surveyor being inefficient is unable to prepare maps for the areas surveyed.

Nellore.—Fifty-six square miles of the Sriharikota forest were surveyed for preparing a map to accompany the final notification.

Cuddapah.—A part of the boundary of the Palkonda reserve (5½ miles in length) was surveyed; but the work was very badly done. The surveyor is now dead.

North Arcot.—Thirty-two proposed reserves, having an area of 216·38 square miles, were surveyed.

South Arcot.—Four reserved forests (having an area of 27·38 square miles) were surveyed and mapped.

Trichinopoly.—Twenty-four reserves under settlement were surveyed and re-notified, the original notification under section 4 having been found to be incorrect.

Salem.—Sketch-maps for several proposed reserves were prepared and the hill-villages enclosed in the inner Javadi reserve surveyed.

Madura.—The departmental work was done by the District Forest-officer and the ranger. No special surveyor was employed.

Tinnevelly.—Maps were prepared for 55⅓ square miles in 32 proposed reserves. Missing survey stones in the boundaries of several reserves were replaced. The enclosures, roads, coupes, fire-lines, &c., in the Kuttalam reserve were surveyed and marked in the Government of India Survey maps.

Nilgiris.—The boundaries of the new Porthimund and Bikkapatte reserves were surveyed. The line-clearing in three other reserves was rectified.

South Canara.—One surveyor surveyed 100 square miles and another 63 square miles. They also prepared maps. Owing to the hilly character of the country, no more progress was made.

Four of the finally notified reserves in South Arcot and one in Bellary appear to have been surveyed by means of the temporary surveyors. The Collector should have stated what this survey was undertaken for. In Madura, 6 square miles in seven blocks were surveyed by the Madras Survey Party, eleven blocks with an area of 11 square miles by the District Forest-officer (Mr. Gass) and eight blocks comprising 5 square miles by the Range officer (Mr. O'Neill).

25. The following table compiled from the monthly returns now submitted by Collectors to the Board shows the area of reserved forests for which final maps had been prepared in each district up to 30th June 1893.

Districts.	Area of reserved forests. SQ. M.	Area finally mapped. SQ. M.	
Ganjám	113·6	80·4	
Vizagapatam ...	24·0	24·0	
Gódávari	441·8	441·8	
Kistna	633·0	220·0	
Bellary	213·5	...	
Anantapur	100·9	66·3	
Kurnool	1,726·6	1,726·6	
Nellore	340·3	340·3	
Cuddapah	965·2	276·6	
Chingleput	154·6	57·3	
North Arcot	688·4	688·4	
South do.	385·3	385·3	
Tanjore	16	16	
Trichinopoly	190·6	143·3	
Salem	966·2	239 727·2	(by the Survey of India Party). (departmentally).
Madura	478·6	478·6	
Tinnevelly	410·6	7·6 403·	(departmentally). (by the Survey of India Party).
North Coimbatore ...	496·5	32·8 143·0	(departmentally). (by the Survey of India Party).
South do. ...	566·0	566	(do. do.).
Nilgiris	233·4	233·4	
North Malabar ...	150·1	33·5	
South do. ...	39·3	39·3	
South Canara ...	99·9	65·3	

It will be seen that the work is still very much in arrears in Kistna, Bellary, Cuddapah, North Coimbatore and North Malabar. The Board is getting monthly returns of progress from the Collectors and will take care that the arrears are worked off as soon as possible. The total cost of departmental survey and mapping, including the expenditure incurred on account of working plans during the period under report, amounted to Rs. 25,117.

26. *Working Plans.*—There is not much to record under this head. Little progress can be expected in the preparation of regular working plans until selection and settlement are further advanced and the subordinate staff is increased. District Forest-officers could, in many cases, frame simple plans based upon area, but the staff to carry them out is wanting. In most of the districts, however, statistics and information are being collected for the preparation of working plans when circumstances will permit.

In *Ganjám* the measurements of sâl (*Shorea robusta*) have been recorded, and the collection of the statistics of demand and supply for each reserve was continued. In *Kistna*, a permit system modified on the principles of the coupe system has been introduced, and is said to be that best adapted to the circumstances of the district until the subordinate staff is less occupied with demarcation and settlement work. In *North Malabar*, *South Coimbatore*, and *Nellore* coupe lines were cut in certain reserves, and in the last-named district an experimental felling was made in the Gúdúr reserve to ascertain the cost and outturn per acre and the period within which the growth would recover itself. In *Cuddapah* creepers, &c., were cut in some forests and standards marked in others. In *North Arcot* and *Salem* the system of located fellings already introduced has been gradually substituted throughout for the permit system, chiefly owing to the exertions of the District Forest-officers, Messrs. Marshall and Brasier. The same system has also been introduced more or less into *Nellore*, *Chingleput*, *Madura*, *Tinnevelly*, *South Arcot* and *Tanjore* and data for future working plans are being collected in all these districts. The enumeration of sandalwood trees ordered by the Conservator in *North Arcot*, *Salem* and *South Arcot* has made no progress, owing, it is said, to want of time on the part of the subordinate establishment. In the *Nilgiris* the Teppakuchi bluegum (*Eucalyptus globulus*) plantation was surveyed for the preparation of a working plan.

27. The provisions of such working plans as already exist appear to have been carried out, with the following exceptions. The plan of the Kojjapalle reserve in *Anantapur* is said to require revision, as the reserve will bear heavier cuttings of palmyra (*Borassus flabelliformis*) than have been allowed for. In the case of the casuarina plantations in *Nellore* and the bluegum (*Eucalyptus globulus*) plantations in the Coonoor range in the *Nilgiris*, the full quantity provided in the plan was not extracted, as the wood felled in previous years remained unsold. This want of demand is attributed in Nellore to the large number of trees that withered from deficient rainfall and, being brought to sale, over-stocked the market, and to keen competition from private forests in the Nilgiris. The provisions of the Morur working plan in *Salem* were not carried out, because no contractors could be got to undertake the fellings.

28. The following working schemes were prepared during the period under report:—(1) a plan for the Narsapur plantation in *Gódávari*; (2) a preliminary working plan for six babul (*Acacia Arabica*) reserves in the Guntur range in *Kistna*; (3) a plan for a portion of the Sandur leased forests (*Bellary*) drawn up by Mr. Hooper under the special orders of Government; (4) a working scheme for the Annamalai reserved forest in *South Arcot*. The last is pending with the Conservator. A scheme for the Chinnar block in *Coimbatore* is also said to be under preparation.

The Collector of *Vizagapatam* states that there are no settled forests in his district sufficiently mature to need working plans. The Conservator remarks, however, that there is no reason why statistics should not be collected for the Peddapalli reserve in the Sarvasiddhi taluk as a preliminary to the preparation of a working plan. This should be done. In *North Arcot* the want of correct survey maps is assigned as the reason for the non-preparation of working plans. This want will, however, be shortly remedied as the Survey of India Party is now engaged in this district.

No satisfactory reasons have been assigned for the want of progress in *Madura*, *Tinnevelly* and *North Malabar*, where forest settlement work cannot be said to be heavy at all events for the present. The Collectors of these districts will take steps to form small working circles and prepare rough schemes for short periods which may be useful when the time comes for the preparation of scientific working plans.

CHAPTER IV.

PROTECTION AND IMPROVEMENT.

(a) *Establishment, Ranges and Beats.*

29. The establishment entertained in each Circle was as shown below:—

—		Northern Circle. 1892–93.	Central Circle. 1892–93.	Southern Circle. 1892–93.	Total.
Permanent.					
Controlling staff	Conservators	1	1	1	3
	Deputy Conservators	5	6	6	17
	Assistant do.	3	2	3	8
	Extra Assistant Conservators including three Sub-Assistants.	4	5	4	13
Subordinate staff	Forest Rangers	15	22	20	57
	Foresters	31	48	48	127
	Forest guards	222	299	210	731
Office establishment	Clerks	18	42	45	105
	Peons, &c.	66	70	63	199
	Total	365	495	400	1,260
Temporary.					
Surveyors		7	4	5	16
Draughtsmen		7	6	4	17
Foresters		1	15	..	16
Overseers		..	1	..	1
Supervisors		..	4	15	19
Depôt-keepers		3	11	11	25
Clerks		7	14	7	28
Permit-keepers		36	17	10	63
Guards		25	..	..	25
Peons		34	6	10	50
Mahouts		6	..	64	70
Tannahdars		189	217	183	589
Maistries		..	12	4	16
Gardeners		62	61	22	145
Lascars		6	20	8	34
Watchers		122	715	207	1,044
Boat syrang		1	1	1	3
	Total	506	1,104	551	2,161

As compared with the previous year there was a decrease of two officers in the Controlling staff due to the retirement of Messrs. H. T. D. Sweet and T. Muhamad Ali Khan Sahib, Assistant Conservators of Forests, and to the fact that no new Assistant Conservators were posted to the Presidency during the period under report. In the subordinate and office establishments there was no change. The temporary establishments for the various Circles were sanctioned with reference to actual necessity and local circumstances.

(b) *General protection and breaches of Forest laws.*

30. The statement in Appendix D shows the number of forest offences reported and the particulars of their disposal.

In paragraph 39 of the Board's report for 1891–92, Collectors were requested to show separately the number of cases sent into Court by the department, the number disposed of by the magistracy and the number pending with the magistrates at the end of the year. No attention has been paid to these instructions by the Collectors of Ganjám, Vizagapatam, Kistna, Anantapur, Cuddapah, Madura, Tinnevelly, Coimbatore (North) and Malabar. The information should not be omitted in the next report.

31. The number of cases reported during the period under review shows a large increase as compared with the figures of the twelve months preceding it.* The increase is noticeable in all the districts, except Kurnool, Trichinopoly, Salem, South Coimbatore and South Malabar. The very large increase in *Gódávari* (626 cases in 1892–93 against 29 in 1891–92) is, however,

	Number of cases.
* 1891–92	8,124
1892–93	10,905

mostly nominal, being due to the fact that 563 cases of breaches of drift-wood rules, which were not hitherto included in the return of forest offences, have been newly brought to account during the period under report. In the other districts, the increase is partly due to the fact that the present report deals with the transactions of fifteen months, while the previous report related only to twelve. It is also ascribed to more efficient detection in *Anantapur*, *Chingleput*, *Nilgiris* and *South Canara*. The decrease in *Kurnool* is ascribed to inefficient detection chiefly in regard to the Chenchus who set fire to the hill forests. The decrease in *Trichinopoly*, *South Coimbatore* and *South Malabar* is small. In the first of these districts, it is apparently due to want of sufficient supervision by the District Forest-officer over the work of his subordinates; in the second, it is attributed to better prevention; while in *South Malabar*, it is said that the small number of offences detected is due to the fact that the forests are all out of the way and are therefore self-protected. The decrease in *Salem* is ascribed to localization of fellings, to the season having been more favorable, and to the fact that the people have become generally better acquainted with the rules. In *Vizagapatam*, which was the smallest forest area in the Northern Circle, the number of offences is the largest. The Conservator considers that this may be due partly to the resumption of the Palkonda taluk, as, when this taluk was leased, the lessees were not able to control the illicit trade in wood.

Making every allowance for the different circumstances of the various districts, the variations in the number of forest offences reported are in many cases surprising. It is not understood, for instance, why there should be only 78 cases reported in the two *Malabar* districts taken together and 831 in *South Canara*, or four times as many in *Tinnevelly* as in *Madura*. The Conservators are requested to scrutinize the figures of their Circles and investigate the causes of such differences.

32. The percentage of cases withdrawn by the department to the total number of cases disposed of shows a slight increase compared with the previous year (6·7 against 4). The proportion is largest in *South Arcot* (24 per cent. and 333 cases) where it is said that there was great negligence on the part of the Range officers in sending up cases to the magistrates. The Collector has taken steps to avoid a recurrence of this unsatisfactory state of things.

33. The percentage of cases compounded to the total number of cases disposed of shows a slight decrease on the whole (39·2 against 46), though there is an increase in certain districts, notably in Nellore, Chingleput and Trichinopoly. In the last-mentioned district 82 per cent. of the total number of cases were compounded and in *Chingleput* 62 per cent. The increase in these districts is attributed to desire on the part of the ryots to compound, where the offences were petty and were clearly proved, and it is reported that the power of compounding has not been used in cases when the evidence was not sufficient to support a conviction.

34. The percentage of acquittals to the number of cases dealt with by the magistracy shows a satisfactory decrease on the whole, viz., 21·4 per cent. against 24. But looking at the individual districts the results are unsatisfactory in Ganjám, Kurnool, North Arcot, Trichinopoly and Madura where the percentage of acquittals shows a large increase over that of the previous year. The *Madura* results are specially discreditable, there having been 49 acquittals against only 40 convictions, and, as in the previous year, when the results were also bad, no explanation has been given. The District Forest-officer responsible was Mr. H. A. Gass. In *North Arcot* where 37 per cent. of the cases dealt with by the magistracy resulted in acquittal, no explanation has been offered. In *Ganjám* (percentage of acquittals 39), undue leniency on the part of the magistracy in dealing with forest offences is alleged. The Collector states that the matter will receive his attention in his capacity of District Magistrate. In *Kurnool* (percentage 39) and *Trichinopoly* (percentage 36), the Collectors state that the preliminary enquiry ordered to be made by the departmental officers before sending up cases to the magistrates was neglected. The District Forest-officers concerned (Messrs. Murray and Hayne) have apparently paid no attention to the instructions issued on this subject and their Collectors will see that they obey orders in future. In *North Coimbatore*, though the percentage of acquittals was less than in the preceding year, it is still strikingly large (38 per cent.). The Collector explained, with reference to a similar remark in the report for 1891–92, that the large percentage of acquittals was due to

want of proper supervision over the Forest subordinates who were apt to send up cases to magistrates on insufficient evidence or out of malice. The Collector is requested to take steps for bringing this unsatisfactory state of things to an end.

35. The number of cases pending disposal at the end of the period under report was particularly large in proportion to the total number for disposal in Ganjám (174), Gódávari (364), Kistna (318), Cuddapah (280), North Coimbatore (109) and South Canara (180). In *Godávari* and *South Canara* the majority of the cases undisposed of are reported as pending with the magistrates; while in regard to the other districts, no explanation has been given. Where the magistracy is at fault, the matter should receive the attention of the Collector in his capacity as District Magistrate, and stringent orders should be issued to avoid recurrence of the delays on the part of the departmental officers which these figures seem to indicate. Separate proceedings will be issued calling on the above-named Collectors to submit special reports as to the present state of the magisterial file of forest offences.

36. In the *Cuddapah* district, a forest guard and a fire-patrol were murdered in December last in the Palkonda reserve while on duty; two persons were found guilty of the crime and transported for life. A few months later, in the Sibbiyala reserve in the same district, a watchman and his father were found murdered; and since the close of the period under report, another reserve watchman in the Seshachallam reserve was murdered. The Conservator was requested some time ago to visit the district and investigate the causes of this outbreak of crime, and his report is awaited. In *South Arcot*, a case of illicit felling and sale of 9,000 casuarina trees by the departmental subordinates was detected. It was tried under the Indian Penal Code and the accused were sentenced to fine and imprisonment.

37. The Government of India recently called for a report on the operation of the rules relating to the grant of rewards to informers in forest offences with a view to ascertain whether the system was open to abuse by placing temptations in the way of forest subordinates to which they ought not to be exposed. The reports received from the district officers have been submitted with Board's Proceedings, dated 25th September 1893, Forest No. 677. They showed that in the great majority of cases, rewards were granted to private informers and not to Forest officers, and that the powers entrusted to Collectors have been judiciously exercised.

(c) *Forest fires and fire-protection.*

38. The results of fire-protection are recorded in the subjoined abstract:—

Circle.	Up to 31st March 1891.		During 1891-92.			During 1892-93.		
	Area of forest reserves attempted in square miles.	Total cost per square mile.	Area attempted in square miles.	Percentage of area attempted which escaped fire.	Average cost per square mile.	Area attempted in square miles.	Percentage of area attempted which escaped fire.	Average cost per square mile.
		Rs. A. P.			Rs. A. P.			Rs. A. P.
Northern	1,532	31 7 1	1,103½	96	10 11 3	1,312	98	14 10 0
Central	2,288	40 9 8	2,321	94	6 2 4	2,407	92	9 3 10
Southern	1,108	99 6 6	1,172	92	16 6 7	1,381	98	18 8 6
Total ..	4,928	50 15 7	4,596½	94	9 13 9	5,100	95	13 2 3

The amount expended during the period under report was Rs. 67,020 against Rs. 45,318 in the previous year. The increase in cost is mainly due to the fact that the fifteen months under report cover one entire fire-season and part of another; and it has also to be observed that a larger area was placed under protection than in the preceding year.

The percentage of area burnt to area protected is largest in the Central Circle and exceeds that of the preceding year. The number of forest fires in the Central

Circle was, in fact, more than double that of 1891–92, and exceeds that of the other two Circles taken together, as will be seen from the following statement:—

Circle.	Number of cases of injury to forests by fire.	
	In 1891–92.	During the period under report.
Northern	8	17
Central	27	61
Southern	25	23
Total ...	60	101

This large increase in incendiarism is ascribed to the fact that during the drought which prevailed in the Ceded districts during 1891 and the early part of 1892, the people spared the forest through fear of losing even the dry grass; while in the period under report an early and copious supply of rain was generally predicted, and the ryots, no longer in dread of losing the remaining supply, fired the jungles on all sides.

39. The districts in which forest fires were most numerous and mischievous are Kurnool in the Northern Circle, Cuddapah and Nellore in the Central, and Madura, Tinnevelly and Coimbatore in the Southern Circles. The fires were partly due to incendiarism and partly to accident, *e.g.*, the sparks from a railway engine, or to carelessness on the part of the subordinates. In *Nellore* they are said to have spread from the adjoining zemindari forests and from the Cuddapah district; in *Madura* from the Travancore territory; and in *Coimbatore* from the Mysore forests. In *Tinnevelly* they are ascribed to carelessness on the part of the charcoal-burners in coupes, and to fires kindled in the adjoining zemindari forests. In *Ganjám*, *Vizagapatam*, *Gódávari* and *Bellary* protection was assisted by heavy showers and by the abundance of green-grass consequent on the more favorable season. The system of burning the grass under departmental supervision early in the season to prevent its taking fire when dry was tried successfully in the *Nilgiris* and has been introduced as an experiment into *North Malabar* and *South Canara*. In *Gódávari*, the statistics of areas under protection are reported to be inaccurate. Correct returns should be obtained and furnished in the next report. The question of confining protection to small well-defined areas so as to render it more effectual is under correspondence between the Collector of *Tinnevelly* and the Conservator of Forests, Southern Circle. This matter should be considered in other districts also.

(d) *Grazing.*

40. Towards the close of the period under report the Board called upon Collectors and Conservators to report whether it would not be more advantageous to do away with the distinction now in force between the "privileged" cattle entitled to grazing in forest reserves at half rates as representing necessaries for agriculture and the non-privileged cattle on which full rates have to be levied under the orders of Government. The great majority of these officers are of opinion that the distinction can be advantageously dispensed with and one uniform rate adopted for both. Their reports are now under the consideration of the Board and the question will shortly be submitted to Government. Information regarding the number of each class of cattle, viz., buffaloes, cows, bullocks, sheep, &c., grazed in the reserves not being given in the district reports, the Board has not been able to furnish information regarding the number of cattle and the incidence of tax per head in the form given in abstract J, printed in paragraph 49 of the report for 1891–92.

41. The following table shows the grazing revenue realized in each district during the period under review as compared with that in the twelve months preceding it:—

Districts.	Revenue from grazing fees, grazing contracts and sale of grass realized in			Rates of grazing fees levied.
	The twelve months ending March 1892.	The twelve months ending March 1893.	The three months from April to June 1893.	
1	2	3	4	5
	RS.	RS.	RS.	
Ganjám	131	2,219	423	Half the maximum rates.
Vizagapatam	108	75	..	Not reported.
Gódávari	3,831	4,297	59	The maximum in the coast forests and half rates elsewhere.
Kistna	43,479	45,187	238	The maximum rates.
Anantapur	1,806	1,536	23	Half the maximum.
Bellary	8,578	3,841	102	Do. do.
Kurnool	12,078	9,213	1,633	Half the maximum in the Nallamalais and one-fourth in the Yerramalais.
Total ..	70,011	66,368	2,478	
Nellore	13,861	14,219	836	Grazing is leased out in this district.
Cuddapah	11,629	7,297	3,657	The maximum rates.
Chingleput	909	4,240	1,163	The maximum in some reserves and three-fourths of the maximum in others.
North Arcot	13,525	7,139	4,530	The maximum on non-privileged cattle and half on privileged cattle.
South Arcot	4,094	8,362	261	Half the maximum on the district cattle and the maximum on others.
Tanjore	649	631	56	The maximum rates.
Trichinopoly	5,162	4,793	510	The maximum for the hill forests and half for others.
Salem	10,121	17,633	667	Half the maximum.
Total ..	59,950	64,314	11,680	
Madura	1,383	929	85	The maximum on non-privileged cattle and half on privileged cattle.
Tinnevelly	2,158	3,349	931	Do. do. do.
North Coimbatore ..	37,032	27,681	13,569	Do. do. do.
South Coimbatore ..	9,324	8,752	5,873	Do. do. do.
Nilgiris	3,323	3,687	1,249	The maximum on the district non-privileged cattle half on privileged cattle, and (under special sanction) double the maximum on alien cattle.
North Malabar	397	383	72	Three annas on buffaloes and two annas on cows, bulls, &c.
South Malabar	144	126	2	Grazing is leased out in this district.
South Canara	..	..	..	Half the maximum.
Total ..	53,761	44,907	21,781	

NOTE.—The maximum rates above referred to are those sanctioned by Government for non-privileged cattle, viz :—

	Per annum. RS. A. P.
1. For buffaloes	0 8 0
2. For bulls, cows, bullocks, calves, horses, asses and foals ..	0 4 0
3. Sheep and goats	0 2 0

For purposes of comparison the figures for the twelve months ending March 1893 are separately shown in the above. Taking these figures alone into consideration the grazing revenue of 1892–93 shows a considerable falling off in the Northern and Southern Circles, while there is an increase in the Central Circle. The decreases are mainly noticeable in Bellary and Kurnool in the Northern Circle, and in North Coimbatore in the Southern. In the two former districts it is attributed to the fact that there was not so much demand for grass and for grazing in the reserves during 1892–93 as in the year previous, as adequate pasture was available outside the reserves in consequence of the more favorable season. For the decrease in *North Coimbatore* no explanation has been given.

The increase in the Central Circle is mainly contributed by the Chingleput, South Arcot and Salem districts. In *Chingleput* the reserves were practically thrown open to free grazing in 1891–92 in consequence of scarcity; but in the succeeding year the season having been favorable, higher rates within the sanctioned maximum were charged. The increase in *South Arcot* is attributed to the larger number of Tanjore cattle grazed in the Tiruvannámalai reserves and to a more efficient method of collecting the fees on them. In *Salem* the increase is due to the raising of the rates of grazing fees which in the previous year were very low. On the other hand there was

a large decrease in the *Cuddapah* and *North Arcot* districts, in the former owing to the smaller number of cattle admitted to grazing in the reserves, and in the latter to delay in the issue of permits, caused by certain Tahsildars not having furnished in time the returns of cattle entitled to the privileged rates of grazing fees.

42. Grazing fees were levied for the first time in *Ganjám* during the period under review and have now been introduced in *South Canara* also. In *Vizagapatam* the revenue is small, as there is plenty of free grazing in unreserved lands and in the Agency. In *Kistna* and *Nellore* the system of leasing the grazing lands has long been in force. The departmental collection of grazing fees was introduced experimentally in 1891–92 in parts of the former district and is reported to be working satisfactorily. The Collector has recently raised the question of leasing the areas hitherto set apart for free grazing in this district and the matter is now under the consideration of the Board. The system of opening the reserves to grazing by rotation so as to keep a portion of each forest in reserve to meet any sudden demand was introduced in the *Bellary* district. The rates of grazing fees in *Kurnool* having been found to be too low, have now been raised. The small revenue realized in *Madura* is said to be due to want of time on the part of the subordinates who were fully engaged in other work; now that settlement work is drawing to a close in this district this often-offered excuse can no longer be accepted. In *Tanjore* and *Malabar* the amount of grazing revenue realized was also small. The former is not really a forest district, and in the latter there is a large extent of private grazing lands.

43. In the present stage of working of the department, Forest officers cannot devote very much attention to the proper *regulation of grazing*. When the preliminaries in regard to reservation are over, and working plans are developed, the matter will receive more attention. Meanwhile the statistics furnished by the District officers can only be accepted with great caution, and there would be little gained by attempting to draw inferences therefrom. Several Collectors have failed to furnish information as regards the area closed to grazing, the area grazed over and the average number of cattle grazed per square mile. The available information is given in appendix E.

44. *Departmental grass-cutting and hay-making.*—A special report received from the Conservators on this subject was lately submitted to Government. From the reports of the Collectors it is observed that experiments were continued in the period under report in Bellary, Cuddapah, North Arcot, South Arcot, Tinnevelly and the Nilgiris, but they have hitherto proved a failure everywhere. In *Bellary* and the *Nilgiris* part of the hay * collected and stored was damaged by sudden rain and became unsaleable.

* District.	Name of forest where hay was collected.	Quantity collected in lbs.	Cost of collecting.	Amount realized.
			Rs.	Rs.
Bellary ..	North-east range and Donimalai range in Sandur.	41,000	112	54
Nilgiris ..	Snowdon and Aramby	4,120	24	16

In *Cuddapah* and *North Arcot* the experiment resulted in a heavy loss owing to absence of demand for dry fodder in consequence of the abundance of green grass outside the reserves. The loss in these districts was about Rs. 5,000 and Rs. 3,000 respectively. In *South Arcot* and *Tinnevelly* there was a strong prejudice against the hay made departmentally, as it was believed to make the cattle sick. The previous year's hay in *Kurnool* and *Salem* became unsaleable chiefly owing to the high prices fixed by the Forest department in the former district, and to the fact that the grass was cut after it had seeded in the latter district. The Collectors of *Salem* and *Nilgiris* have reported that experiments will be renewed with greater care and under more favorable conditions. As stated in Board's Proceedings, dated 3rd October 1893, Forest No. 696, the Board thinks that there is no reason why such operations, if undertaken on a small scale, should not be successful if proper precaution is taken to select suitable localities near centres of demand, and to cut the grass before spear-heads have formed. In *Bellary* 4,073 tons of grass cut departmentally was sold for Rs. 2,502.

In *Cuddapah* the ryots, and in *Tinnevelly* the minor forest produce contractors, were encouraged to cut grass from the reserves which is a great improvement on the system of grazing it down.

(e) *Natural reproduction.*

45. The remarks of the Conservators of the Northern and Central Circles on this subject will be found in appendix F, along with an abstract of the reports of the Collectors of the Southern Circle. Mr. Cherry, the Conservator of this circle, has in his report disposed of the matter in a few short sentences.

In the Northern Circle, reproduction was satisfactory in all the districts except *Anantapur.* The sâl (*Shorea robusta*) is the chief timber tree in the *Ganjám* and *Vizagapatam* districts, and the Yepi (*Hardwickia binata*) in *Kistna, Bellary* and *Anantapur.* The effects of continuous protection are most striking in the Peddapalli reserve in the *Vizagapatam* district. The reproduction of sâl (*Shorea robusta*) in *Ganjám* is rapid even in unprotected blocks. In *Gódávari* reproduction is somewhat affected in certain reserves by the surplus water of the delta irrigation. In *Kistna*, the growth of prickly-pear (*Opuntia dillenii*) in salt marshes is found to be a protection to seedlings and to bind the sand and form a soil with its own *debris.* Reproduction in *Anantapur* is retarded by extreme dryness and want of cover; in the Nallamalais in *Kurnool*, by regularly recurring fires; and in the Yerramalais in the same district by excessive grazing.

The Conservator, Central Circle, observes that "no special measures were undertaken during the period under report to facilitate natural reproduction from seed from the standing mother-trees by opening out the canopy or by clearing undergrowth. Nothing can be undertaken systematically until the subordinate staff is strengthened and the works of selection and demarcation are further advanced." Reproduction from coppice was satisfactory in Balapalle and in the Aradur and Sathiavedu reserves in *Cuddapah* and *Chingleput* respectively. Seedlings of *Bambusa arundinacea* and *Dendrocalamus strictus* were found in abundance on the Javadi hills in *North Arcot* and *Salem* wherever spared by the cattle. In *North Arcot* 3 areas in the Javadis were fenced to encourage sandalwood reproduction. The result was fairly successful. In forests consisting chiefly of *Albizzia amara* there was no reproduction even where grazing was limited. In *Nellore*, the coppicing of casuarina was found to be a failure.

In the Southern Circle, natural reproduction is reported to be unmistakeably good under proper protection; but some areas which are rich in grass and are not grazed sufficiently are liable to fires and do not improve. In the *Nilgiris* the *Eucalyptus* and the teak (*Tectona grandis*) are growing well from coppice shoots. In *South Malabar*, the seedling growth of *Xylia dolabriformis*, *Lagerstræmia microcarpa*, *Pterocarpus marsupium* and *Dalbergia latifolia* is good. In *South Canara*, the principal enemies to reproduction are grazing, fire, high winds, hilly ground and violent floods.

(f) *Artificial reproduction.*

46. The subjoined statement shows the area under plantations, topes and cultural operations together with the cost incurred during the period under report as compared with the figures of the preceding year:—

Abstract H.—Plantations, topes and cultural operations in other areas.

	Plantations.								Topes.			
	Up to 1891–92.		Added during				Total.		Up to 1891–92.		Added during	
			1891–92.		1892–93.						1891–92.	
	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	*Cost.	Area in acres.	Cost.	Area in acres.	Cost.
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Northern Circle	909	34,201	25	2,593	2	3,008	936	39,802	3,517	18,316	..	1,204
Central ,, ...	12,676	6,52,122	750	21,563	3	26,749	13,429	7,00,434	7,909	3,47,687	2,577	4,661
Southern ,, ...	6,275	4,50,208	124	12,622	224	18,377	6,623	4,81,207	14,363	59,277	159	2,287
Grand Total ..	19,860	11,36,531	899	36,778	229	48,134	20,988	12,21,443	25,789	4,25,280	2,736	8,152

	Topes—*cont.*				Other areas.							
	Added during		Total.		Up to 1891–92.		Added during				Total	
	1892–93.						1891–92.		1892–93.			
	Area in acres.	Cost.	Area in acres.	*Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	*Cost.
	14	15	16	17	18	19	20	21	22	23	24	25
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Northern Circle	25	1,902	3,542	21,422	412	4,300	10	1,688	37	1,872	459	7,860
Central ,, ...	— 170	6,577	10,316	3,58,925	3,764 † mls. 100	40,722	67	2,143	42	2,450	3,873 † mls. 100	45,315
Southern ,, ...	12	327	14,534	61,891	1,961	12,959	211	1,995	312	3,535	2,484	18,489
Grand Total ..	— 133	8,806	28,392	4,42,238	6,137 † mls. 100	57,981	288	5,826	391	7,857	6,816 † mls. 100	71,664

* Includes maintenance of existing plantations, topes, &c.

† "Running miles;" the area is not given.

The additions to the area of plantations were mainly in the *Madura*, *Nilgiri* and *South Malabar* districts. The decrease in the area of topes is merely nominal, being due to a revised estimate of areas in the Central Circle. Five new topes were added to the list—one in *Vizagapatam*, one in *Chingleput* and three in *South Arcot*. The districts in which new areas were brought under cultural operations were *Ganjám*, *Nellore* and *Tinnevelly*. The cost under all heads shows a considerable increase; but it must be remembered that this report deals with the transactions of fifteen months instead of twelve.

Information in respect of the work done in the various districts under (*f*) *Artificial reproduction*, (*g*) *Improvement fellings*, (*h*) *Experiments and planting of Exotics* will be found in Appendix F. It will suffice here to quote the following remarks of the Conservator, Central Circle, in regard to artificial reproduction:—

"In this circle, experience has shown that broadcast sowings unaccompanied by preparation of the soil are a failure and waste of money. The success of such work even when the season is favorable depends upon the interest and energy shown by the subordinates in charge, and these qualities, I fear, are generally wanting. District Forest-officers have no time to personally supervise such work."

Mr. Morgan, District Forest-officer, Nilgiris, has taken much interest in experiments with exotics in that district. It is observed that no such experiments were made in Kurnool and Anantapur.

(i) *Communications and Buildings.*

47. The subjoined statement shows the outlay on communications and buildings during the period under report as compared with the preceding year:—

	1891–92.	Fifteen months ending June 1893.
	RS.	RS.
Roads and bridges	30,796	37,286
Buildings	38,035	59,395
Other works	3,666	3,625

The percentage of the total outlay on roads and buildings during the period under report to the gross revenue was 5·1 against 4·2 in 1891–92. As usual, the expenditure on buildings greatly exceeds that on roads. A list of the principal new roads and buildings completed during the year is appended (Appendix G).

In several districts the expenditure on new roads was stopped pending sanction to a general project of road works drawn up with reference to the remark in Government of India's review of the report for 1890–91.

Considerable sums were, however, spent in repairs and improvements to existing roads in several districts, notably in Anantapur, South Arcot, Nilgiris and North Coimbatore.

Tramways.

48. The results of the working of the tramway in North Arcot and Nellore are detailed in Appendix H. In *North Arcot*, the working of the tramway shows a loss as compared with transport by carts; but it must be remembered that though the tramway was actually worked only for 3 months during the year, interest and depreciation have been calculated for the whole year. As it was not found feasible to work the line adequately in the North Arcot district, it has been sent to *Nellore* since the close of the period under report.

Of the two lines in *Nellore* the one in the casuarina plantations was worked at a profit, while that at Sriharikota was less successful. The results of the latter would have been more favorable, had it not been for the fact that the new waggons were received only in November 1892 and the estimated quantity of wood was not therefore fully exported.

In *Cuddapah* two miles of permanent line of tramway and several temporary offshoots have been laid down in Ballapalli working circle block II. The work has been well done. The revenue and expenditure of the line are as follow:—

		RS.	A.	P.
Expenditure.				
(*a*) Cost of material		13,967	5	10
(*b*) Cost of laying lines		1,850	9	0
(*c*) Cost of trucking fuel		93	9	6
Total ...		15,911	8	4
Revenue.				
(*d*) Received from the Contractor for the use of the trucks for transporting his fuel		191	1	6
Profit (*d*—*c*)		97	8	0

Calculated on the total capital cost of the tramway and of laying the line, it will be seen that the net profit was only ·6 per cent. during the 18 months the line has been in the district. It has to be remembered however that for 8 months no revenue was realized as the line was under construction. From the current year allowance should be made for interest on the capital outlay and depreciation of stock and the results reported in the form given in Appendix H to this report for the North Arcot and Nellore districts. The working of the tramway in *South Coimbatore* has resulted in a loss. The accounts of this line have been worked out by the Collector on somewhat different lines from those in Nellore and North Arcot. They are also printed in Appendix H.

Canal.

49. The canal in Lankavanidibba in *Kistna* is reported to have silted up. Steps will be taken to have it cleared in the current year.

Boats.

50. Two new boats were purchased in *South Malabar* and the District Forest-officers' boats in *Gódávari* and *Kistna* were repaired at a cost of Rs. 200 each and minor repairs were done to the foresters' boats in the latter district. A boat in *Nellore* became useless and was sold. A small boat was bought for the reserve watcher at Coringa in *Gódávari*.

CHAPTER V.

YIELD AND WORKING.

51. The total quantity of timber and other produce cut and removed during the period under report is shown in the subjoined abstract :—

ABSTRACT I.—Comparative yield as per Forms 69, 72-A and 72-B.

—	Timber (in cubic feet) including sandal-wood.		Fuel (in cubic feet).	
	1891-92.	1892-93 (1st April 1892 to 30th June 1893).	1891-92.	1892-93 (1st April 1892 to 30th June 1893).
1	2	3	4	5
By Government Agency	266,546	(*a*) 292,300	1,806,320	(*b*) 2,038,099
By purchasers (including confiscations) ..	2,722,596	2,634,450	12,179,502	10,098,923
Free grants	97,795	39,806	1,351	1,543
Total ..	3,086,937	2,966,556	13,987,173	12,138,565
Increase or decrease in 1892-93 as compared with 1891-92	..	— 120,381	..	— 1,848,608
Percentage of increase or decrease over the previous year's total	..	— 4	..	— 13

(*a*) Includes 6,197 cubic feet, being excess found on remeasurement of timber and sandal-wood collected and taken to depôt in previous years as per form No. 70.

(*b*) Includes 6,485 cubic feet, being excess found on remeasurement as per form No. 70.

—	Bamboos (in number).		Minor produce (gross value in rupees).	
	1891–92.	1892–93 (1st April 1892 to 30th June 1893).	1891–92.	1892–93 (1st April 1892 to 30th June 1893).
	6	7	8	9
By Government Agency	32,352	34,039	(*a*) 45,051	(*a*) 48,951
By purchasers (including confiscations) ..	31,035,500	20,652,606	5,95,158	7,54,097
Free grants	(*b*) 82,913	92,748	633	207
Total ..	31,150,765	20,779,393	6,40,842	8,03,255
Increase or decrease in 1892–93 as compared with 1891–92	..	— 10,371,372	..	+ 1,62,413
Percentage of increase or decrease over the previous year's total	..	— 33	..	+ 25

(*a*) Includes grazing fees. (*b*) Includes 2,700 bamboos omitted in the report for 1891–92.

NOTE.—The value of minor produce given above is that of the quantity *disposed* of, not that of the quantity *collected*, as the value of the latter is not known.

The removals of timber, fuel and bamboos show a decrease as compared with those of 1891–92 while the value of minor produce alone shows an increase. The decreases occur under removals by purchasers.

The decrease in timber is mainly due to the closing of a certain reserve against cutting in *Gódávari*, to the fact that in *Kistna* the jungle from which removals were made in former years was nearly exhausted, to smaller revenue from sale of trees on lands assigned for cultivation in *Nellore* and to want of time on the part of the establishment in *Madura* to supervise removals. There are also considerable decreases in *Cuddapah* and *North Malabar* which have not been explained.

The falling off under firewood is due to want of demand from the Public Works Department in *Ganjám*, to keen competition from private forests in *Bellary*, and to slack demand in *Kurnool*. The Collectors of *Cuddapah*, *North Arcot* and *South Arcot* have not explained the variations in their districts.

The decrease in the number of bamboos occurs mainly in Kistna, North Arcot, Trichinopoly, Salem and Nilgiris. In the first named district it is due to the closing of a bamboo forest against cutting. The decreases in the other districts have not been explained.

The average yield per square mile of forest area was 879 cubic feet of timber and fuel, 1,209 bamboos and Rs. 47 worth of minor produce, against 954 cubic feet of timber and fuel, 1,742 bamboos and Rs. 36 worth of minor produce, respectively, in the previous year.

Section I.—Departmental operations.

52. The numbers of trees felled by departmental agency and converted into logs, &c., are shown in the subjoined abstract:—

Year.	Balance on hand at the beginning of the period under report.	Number of trees felled during the period under report.	Total.	Converted into logs, &c., during the period under report.	Balance on hand at the end of the period under report.
1891–92	479	27,022	27,501	26,293	1,208
1892–93 (15 months) ..	1,208	58,002	59,210	58,199	1,011

Even making allowance for the fact that the period under report comprises 15 months against 12 months in the preceding year, the number of trees felled shows a large increase, chiefly in Gódávari, Kistna, Bellary and North Arcot. The increase in *Gódávari* is due mainly to the felling of teak trees in the unreserved forests of the

Bhadráchalam sub-division and to a large number of trees blown down by a heavy storm in one of the coast plantations. In *Kistna* and *Bellary* sample areas were felled for the preparation of working plans. In the former district the large number of trees withered by the drought also contributed to the increase. The increase in *North Arcot* has not been explained, and it is observed that, though the number of trees felled there was larger, the quantity of timber and fuel collected was less than in the previous year.

53. The following abstract shows the statistics of timber and other produce collected and disposed of departmentally during the period under report as compared with the year preceding:—

ABSTRACT J.—Produce collected and disposed of (Forms 69, 70 and 71).

Produce collected.	During 1891–92.			During 1892–93 (from 1st April 1892 to 30th June 1893).		
	Quantity.	Cost.	Average.	Quantity.	Cost.	Average.
1	2	3	4	5	6	7
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber in cubic feet ..	261,420	45,981	0 2 10	(*a*) 288,744	62,802	0 3 5
Fuel in cubic feet ..	1,806,320	70,437	0 0 7	(*b*) 2,038,099	84,900	0 0 8
Bamboos in number ..	32,352	1,034	0 0 6	34,039	1,492	0 0 8
Sandalwood in cubic feet	5,126	4,971	0 15 6	(*c*) 3,556	3,697	1 0 8
Minor produce in maunds of 25 lbs. ..	184,404	41,276	0 3 7	(*d*) 38,430	29,088	0 12 1
Total ..	..	1,63,699	..	..	1,81,979	..

Produce disposed of.	During 1891–92.			During 1892–93 (from 1st April 1892 to 30th June 1893).			Stock on 1st April 1892.	Stock on 30th June 1893.
	Quantity.	Sales.	Average.	(*e*) Quantity.	Sales.	Average.		
8	9	10	11	12	13	14	15	
		Rs.	Rs. A. P.		Rs.	Rs. A. P.		
Timber in cubic feet ..	389,808	1,66,936	0 6 10	393,490	1,79,592	0 7 4	264,640 (*f*)— 340 (*g*)—1,141	158,413
Fuel in cubic feet ..	1,833,591	1,22,049	0 1 1	2,368,992	1,35,995	0 0 11	894,816 (*f*)+ 340 (*g*)—1,401	562,862
Bamboos in number ..	45,867	1,312	0 0 5	58,859	4,144	0 1 2	31,514	6,694
Sandalwood in cubic feet	4,183	40,957	9 12 7	4,140	40,100	9 10 11	1,828	1,244
Minor produce in maunds of 25 lbs. ..	36,548	45,051	1 3 8	152,082	48,951	0 5 2	157,921	44,269
Total ..	..	3,76,305	..	..	4,08,782	..	..	..

(*a*) Includes 6,195 cubic feet found in excess in depôts as per form No. 70.
(*b*) Do. 6,485 do do. do. do.
(*c*) Do. 2 do. do. do. do.
(*d*) Do. 28 maunds do. do. do.
(*e*) Do. that used departmentally, written off, &c., as per forms 69 and 70.
(*f*) 340 cubic feet wrongly classed under miscellaneous timber during 1891–92 has been correctly classed under fuel this year.
(*g*) Quantity shown in excess during 1891–92.

54. The quantity of timber and fuel and the number of bamboos *collected* show a considerable increase; and this is what might be expected from the longer period to which this report relates. But taking the individual districts into consideration, there is a large decrease under timber collected in Ganjám, Cuddapáh, North Arcot, South Arcot, Tinnevelly, North Coimbatore and North Malabar. This decrease was more than counterbalanced by an increase in Gódávari, Kistna, Kurnool, South Malabar and South Canara. In *Ganjám* the departmental felling was restricted so as not to interfere with the purchasers removing marked trees under permits. In *Cuddapah*, owing to slack demand for redwood roots and stumps, of which there was a large stock on hand, a smaller quantity was collected by the department during the period under report. The decrease in *South Arcot* is attributed to want of establishment to undertake

departmental operations, and also to slack demand for casuarina timber in the coast plantations. The decreases in *North Arcot*, *Tinnevelly*, *North Coimbatore* and *North Malabar* have not been explained.

The increase in *Gódávari* and *Kistna* is due to the larger number of trees felled which has been already explained. In *Kurnool* departmental fellings were carried out in 1892–93; this was not done in the previous year. *In South Malabar* the Nilambur plantation was newly worked during 1892–93 and the outturn of timber in Amarampalam and Palghat Ranges was larger than in the previous year. In *South Canara* there was greater demand for timber for certain large public buildings.

Under *disposal of timber* there was a large increase in Cuddapah due to the sale of the stock collected in previous years. The larger sale in the Nilgiris is due to the greater demand for timber from Mysore merchants.

55. Under disposal of *fuel* the increase is the net result of large decreases in Ganjám, Gódávari, Cuddapah, South Arcot, Trichinopoly and Madura, counterbalanced by increase in Kistna, Bellary, Kurnool, Nellore, Salem, Tinnevelly, South Coimbatore, Nilgiris and South Canara.. In *Ganjám* there was no demand for fuel from the Public Works Department as in the previous year. In *Gódávari*, though the quantity collected was larger, the quantity disposed of was less than in the previous year, and no explanation is given for the discrepancy. In *Cuddapah*, *South Arcot* and *Trichinopoly*, the decrease is attributed mainly to the absence of demand from the Railways; and in *Madura* to the competition from private dealers who undersold the departmental fuel and to the difficulty in getting carts as the owners were engaged in conveying material to the Periyár works. The increase in *Bellary* is due to the felling of sample areas; in *Kistna* to the sale of the stock of previous years; and in *Kurnool* to departmental operations having been newly undertaken during the period under report. In *Salem* fuel was supplied departmentally to the Railway Company and to the Central Jail; in the *Nilgiris* to the Commissariat; and in *South Canara* to the sandalwood-oil distillers. In *Nellore*, *Tinnevelly* and *South Coimbatore*, the increase was mainly due to the inclusion of the transactions of the three months from April to June 1893.

56. Under disposal of *bamboos*, the increase occurs mainly in the Cuddapah and in the North and South Arcot districts. These variations have not been explained. On the other hand a large decrease occurred in Kurnool owing to the fact that the collection of bamboos departmentally in the previous year was undertaken to provide work for the hill tribes during the scarcity which has since passed away.

57. Under *minor produce*, while the quantity *collected* shows a large decrease, the quantity *disposed of* shows an increase, as compared with the preceding year. This is due to the fact that a large quantity of hay collected in the preceding year in Kurnool, Cuddapah, North Arcot and Salem was either written off or sold during the current year. Even excluding this, the quantity of produce collected during the period under report shows a decrease which is specially noticeable in South Coimbatore and is attributed to the indifference of the Range officers in that district. The Collector and Conservator are in favour of abandoning the departmental system and adopting the leasing system in this district. In South Canara, this change from the departmental to the leasing system was adopted during the period under report and is said to be working satisfactorily.

58. The cost of collection under all the heads was higher than in the preceding year. The reason for this has not been explained in the Collectors' reports. As regards minor produce, even if the quantity and cost of grass which is included under this head (viz., 150,386 and 9,096 maunds and Rs. 13,842 and 678 respectively), are deducted from the figures of both years, the cost per maund in 1892–93 will be found to be about Annas 15–6 against Annas 12–11 in 1891–92. The rates of prices realized during the period under report except in the case of fuel are slightly better than those of the previous year; but the net profit, except in the case of bamboos is much less, as the cost of collection is greater.

Section II.—Removals by purchasers under the permit system.

59. The subjoined abstract shows the quantity and value of timber and other produce removed under the permit system, compared with the results of the preceding year.

ABSTRACT K.—Produce removed by permit-holders on seigniorage or otherwise (Appendix 72-A).

Produce.	During 1891–92.			During 1892–93 (from 1st April 1892 to 30th June 1893).		
	Quantity.	Amount of sales.	Average.	Quantity.	Amount of sales.	Average.
Northern Circle.		RS.	RS. A. P.		RS.	RS. A. P.
Timber .. .. .. C. ft.	1,242,240	1,20,179	0 1 7	1,364,512	1,23,528	0 1 5
Firewood .. .. .. ,,	3,525,138	54,318	0 0 3	2,859,225	55,644	0 0 3
Bamboos .. .. .. No.	10,924,176	56,604	0 0 1	11,858,261	68,638	0 0 1
Grass and grazing	..	68,458	..	..	68,670	..
Minor produce	..	88,709	..	..	82,538	..
Total ..	..	3,88,268	..	..	3,99,018	..
Central Circle.						
Timber .. .. .. C. ft.	1,128,210	81,927	0 1 2	976,233	96,557	0 1 6
Firewood .. .. .. ,,	5,861,006	1,26,453	0 0 4	3,681,693	1,50,804	0 0 8
Bamboos .. .. .. No.	19,734,374	66,880	0 0 1	6,460,979	77,824	0 0 2
Grass and grazing	..	60,133	..	..	76,595	..
Minor produce	..	2,27,591	..	..	2,99,925	..
Total ..	..	5,62,984	..	..	7,01,705	..
Southern Circle.						
Timber .. .. .. C. ft.	307,249	46,558	0 2 5	250,900	45,592	0 2 11
Firewood .. .. .. ,,	2,777,741	79,701	0 0 6	35,17,831	91,706	0 0 5
Bamboos .. .. .. No.	355,034	21,659	0 1 0	2,291,488	25,850	0 0 2
Grass and grazing	..	53,420	..	..	66,677	..
Minor produce	..	95,479	..	..	1,58,830	..
Total ..	..	2,96,817	..	..	3,88,655	..
Presidency Total—						
Timber .. .. .. C. ft.	2,677,699	2,48,664	0 1 6	2,591,645	2,65,677	0 1 7
Firewood .. .. .. ,,	12,163,885	2,60,472	0 0 4	10,058,749	2,98,154	0 0 5
Bamboos .. .. .. No.	31,013,584	1,45,143	0 0 1	20,610,728	1,72,312	0 0 1
Grass and grazing	..	1,82,011	..	..	2,11,942	..
Minor produce	..	4,11,779	..	..	5,41,293	..
Grand Total of sales, Rupees ..	..	1,248,069	..	..	14,19,378	..

Under timber, fuel and bamboos the *value* of the sales shows an increase, while the *quantity* removed shows a decrease. The increase in the value is chiefly due to the better prices realized for the produce owing to greater demand arising from a more favorable season, as well as to better supervision over the removals.

60. In the value of *timber* sold the increase was small and occurred in all the districts except Gódávari, Kistna, North Arcot, Tanjore, North Coimbatore, North Malabar and South Malabar. In *Godávari* a certain reserve was closed against cutting; in *Kistna* the jungle from which the bulk of the revenue under this head was derived was nearly exhausted in previous years and restrictions were placed on the removal of babul (*Acacia Arabica*) and palmyras (*Borassus flabelliformis*). In *North Arcot*, it is said that the permit system was discouraged for want of officers to supervise the fellings; but this explanation can only account for a decrease in the quantity, and not for the increase in the quantity and the decrease in the revenue which occurred in this district. In *Tanjore*, the decrease is small, while the decreases in *North Coimbatore* and *North Malabar* have not been explained. In *South Malabar*, while the quantity shows an increase, the value shows a falling off, and this is ascribed to the fact that a large quantity of inferior jungle wood was removed from the new clearings at Nilambur. The increase is mainly due to greater demand in the *Nilgiris*, to better detection in *South Canara*, to more favorable season in *Cuddapah*, to larger sales of trees on lands assigned for cultivation in *Bellary* and *Chingleput* and to larger sales of trees in tank-beds, &c., in *Salem*.

61. The increase in the value of *fuel* occurred mainly in Gódávari, Chingleput, North and South Arcot, Tanjore, Salem and North Coimbatore. It was partially counter balanced by a large decrease in Bellary and Cuddapah. The increase is mainly due to larger demand owing to the opening of the railway in *Godávari*, to the larger sale of trees in lands assigned for cultivation in *Chingleput*, to competition in the

sale of fuel coupes in *South Arcot*, to better check on removals in *Salem*, and to greater demand in *Tanjore*. The increase in *North Arcot* and *North Coimbatore* has not been explained.

The increase under *bamboos* is generally due to larger removals and is spread over several districts; but in Kistna and South Arcot, there was a large falling off, in the former owing to the closing of the Kondapalli reserve against cutting, and in the latter owing to the last lease of the bamboo coupes not having fetched a good price. There were also slight decreases in Anantapur, North Arcot, Tanjore, and Madura; but these do not call for any special remark.

62. The variations under *grazing* have been explained under chapter IV, section (*d*).

63. The value of *minor produce* shows a very large increase, which occurs in almost all the districts except Kistna, Bellary, Anantapur and Nellore. In the first two districts, the decrease is attributed to the failure of fruit crops consequent on the drought; in *Anantapur* to the restrictions placed on the cutting of *tangedu* (*Cassia auriculata*) with a view to improve its growth by providing rest from cutting and in *Nellore* to the complete cessation of the mica-mining enterprise. The increase in the several districts is mainly due to the inclusion of the figures of the three months from April to June 1893. It is also partly due to the increase under "*amroy*" (rent of mango topes) in *Cuddapah*; to the larger removal of leaf manure in *Tanjore*; to better offers obtained for minor produce generally in *Salem*; to the advance collection of the rent of 1893–94 in the *Nilgiris*; and to the introduction of the leasing system for the first time in *South Canara*.

64. The subjoined statement shows the comparative cost of departmental and private working and the net profit under each system. The statement has been worked out on the lines adopted in the report for 1891–92:—

Items.	Measure.	Quantity collected (Forms 69, 70 and 72).	Amount of sale-proceeds (Forms 71 and 72).	Add or deduct increase or decrease in value of stock in hand.	Net financial result (column 4 + or − column 5).
1	2	3	4	5	6
Departmental Working—			Rs.	Rs.	Rs.
Timber	Cubic feet.	288,744	1,79,592	— 5,821	1,73,771
Fuel	Do.	2,038,099	1,35,995	— 42	1,35,953
Bamboos	Number.	34,039	4,144	— 100	4,044
Sandalwood	Cubic feet.	3,556	40,100	+ 21,064	61,164
Minor produce	Maunds.	38,430	48,951	— 20,112	28,839
Private Working—					
Timber	Cubic feet.	2,591,645	2,65,677	..	2,65,677
Fuel	Do.	10,058,749	2,98,154	..	2,98,154
Bamboos	Number.	20,610,728	1,72,312	..	1,72,312
Grazing	..	Not known.	2,11,942	..	2,11,942
Minor produce	..	Do.	5,41,293	..	5,41,293

Items.	Charges (form 64).			Net profit or loss (column 6 — column 9).	Rate of net profit (column 10÷column 3) per measure in column 2.
	A. Conservancy and Works.	B. Establishment and Contingencies.	Total.		
	7	8	9	10	11
Departmental Working—	Rs.	Rs.	Rs.	Rs.	Rs. A. P.
Timber	62,802	89,119	1,51,921	+ 21,850	+ 0 1 3
Fuel	84,900	67,485	1,52,385	— 16,432	— 0 0 1
Bamboos	1,492	2,056	3,548	+ 496	+ 0 0 3
Sandalwood	3,697	19,898	23,595	+ 37,569	+ 10 9 0
Minor produce	29,088	24,292	53,380	— 24,541	— 0 10 3
Private Working—					
Timber	16,275	36,207	52,482	+ 2,13,195	+ 0 1 4
Fuel	18,268	40,636	58,904	+ 2,39,250	+ 0 0 4
Bamboos	10,555	23,488	34,043	+ 1,38,269	+ 0 0 1
Grazing	12,923	28,750	41,673	+ 1,70,269	Not known.
Minor produce	33,169	73,769	1,06,938	+ 4,34,355	Do.

Except in the case of fuel and minor produce, departmental working shows a net profit and in the case of bamboos this profit is larger than under private working.

65. The sales of produce confiscated for removal without permit by private purchasers are shown in the subjoined abstract:—

ABSTRACT I.—Confiscation.

	During 1891-92.			During 1892-93.		
	Quantity.	Value.	Average.	Quantity.	Value.	Average.
Northern Circle.		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber .. .. C. ft.	32,036	7,712	0 3 10	26,869	5,922	0 3 6
Firewood .. .. .. „	6,623	490	0 1 2	9,804	639	0 1 1
Bamboos .. .. .. No.	6,930	102	0 0 3	5,909	43	0 0 1
Minor produce. Money value.	..	763		..	320	..
Total ..	..	9,067	..	..	6,924	..
Central Circle.						
Timber .. .. C. ft.	7,179	2,119	0 4 9	7,946	2,835	0 5 9
Firewood .. .. .. „	6,382	429	0 1 1	22,388	642	0 0 6
Bamboos .. .. .. No.	10,086	180	0 0 2	26,355	52	0 0 0½
Minor produce. Money value.	..	327	..	..	423	..
Total ..	..	3,005	..	..	3,952	..
Southern Circle.						
Timber .. .. .. C. ft.	5,682	1,162	0 3 3	7,990	989	0 2 0
Firewood .. .. .. „	2,612	142	0 0 10	7,982	318	0 0 8
Bamboos .. .. .. No.	4,900	102	0 0 4	9,614	103	0 0 2
Minor produce. Money value.	..	278	..	..	119	..
Total ..	..	1,584	..	..	1,529	..
Presidency Total. Timber .. .. C. ft.	44,897	10,993	0 3 11	42,805	9,746	0 3 8
Firewood .. „	15,617	1,061	0 1 1	40,174	1,599	0 0 8
Bamboos .. No.	21,916	334	0 0 3	41,878	198	0 0 1
Minor produce. Money value.	..	1,368	..	..	862	..
Grand Total ..	..	13,756	..	..	12,405	..

There is an increase in the value of firewood, but a decrease under timber, bamboos and minor produce, the net result being a decrease of Rs. 1,351. This decrease is small and spread over several districts, viz., Gódávari, Kistna, Anantapur, Kurnool, Cuddapah and North Coimbatore.

Section III.—Free grants of forest produce.

66. The following statement shows the value of timber and other produce removed on free permits during the period under report:—

ABSTRACT M.—Free grants.

Districts.	Timber.	Firewood.	Bamboos.	Minor produce.	Total money value.
Northern Circle.	C. FT.	C. FT.	NO.	RS.	RS.
Ganjám	5,360	..	20,200	..	411
Gódávari	5,550	..	6,600	..	596
Kistna	1,180	..	..	67	171
Anantapur	1,236	..	..	1	110
Bellary	2,320	..	..	108	271
Kurnool	2,940	..	26,500	..	331
Total ..	18,586	..	53,300	176	1,890
Free grants of previous year	5,749	915	12,069	45	619
Central Circle.					
Nellore	1,851	..	..	2	230
Cuddapah	520	..	13,500	..	271
Chingleput	..	..	..	28	28
North Arcot	3,365	600	5,700	1	776
South Arcot	520	400	1	..	61
Trichinopoly	1,244	..	1,050	..	90
Salem	778	..	1,892	..	180
Total ..	8,278	1,000	22,143	31	1,636
Free grants of previous year	89,070	400	65,384	588	10,033
Southern Circle.					
Madura	1,000	..	..	..	75
North Coimbatore	2,160	..	8,750	..	190
South „	5,320	..	..	..	41
Nilgiris	3,990	63	5,955	..	650
North Malabar	472	480	2,600	..	62
Total ..	12,942	543	17,305	..	1,018
Free grants of previous year	2,976	36	(a) 5,460	..	(a) 318
Total free grants for 1892–93 ..	39,806	1,543	92,748	207	4,544
Total free grants for 1891–92 ..	97,795	1,351	(a) 82,913	633	(a) 10,970

(a) The Collector of Coimbatore reports that 2,700 bamboos valued at Rs. 17 and given away on free permits during 1891–92 were omitted to be shown in that year's report by a mistake. The number and the value have been now included.

The total results show a large decrease, which occurred chiefly in the Nellore and North Arcot districts in the Central Circle. In the former, the necessity for free grants was less, owing to early rains in consequence of which the damage to houses caused by fire was less. In the latter district, the decrease is due to the fact that no free grants were made to ryots for agricultural implements. In the Northern and Southern Circles there was an increase chiefly in Gódávari, Kistna, Kurnool and Nilgiris. The increase in *Gódávari* has not been explained. In *Kistna* it is attributed to the large number of fires that broke out in the early part of the year. In *Kurnool* it is stated that the fires were more numerous owing to the inclusion of two fire seasons during the year under report. In the *Nilgiris* large grants were made to the Todas for building huts and to the Badagas for cattle-kraals (sheds) owing to the adverse season at the beginning of the year.

CHAPTER VI.

FINANCIAL RESULTS.

67. The revenue and expenditure in each Circle for the period under report as per Accountant-General's Form No. 64 are shown below in comparison with the actuals of the year 1891–92 :—

Items.	Circles.	1891–92.	1892–93.	The three months from April to June 1893.	Total for the 15 months.
		Rs.	Rs.	Rs.	Rs.
Revenue	Northern	4,38,680	3,57,732	96,337	4,54,069
	Central	7,01,855	7,01,279	1,62,320	8,63,599
	Southern	5,53,680	5,18,201	1,29,949	6,48,150
	Total ..	16,94,215	15,77,212	3,88,606	19,65,818
A. Conservancy and Works	Northern	1,16,974	1,10,168	29,828	1,39,996
	Central	2,47,479	2,31,187	60,030	2,91,217
	Southern	(a) 3,08,317	3,36,818	59,498	3,96,316
	Total ..	(a) 6,72,770	6,78,173	1,49,356	8,27,529
B. Establishment ..	Northern	1,53,177	1,78,674	47,566	2,26,240
	Central	2,16,450	2,47,061	57,064	3,04,125
	Southern	2,23,757	2,26,350	54,684	2,81,034
	Total ..	5,93,384	6,52,085	1,59,314	8,11,399
Total of expenditure ..	Northern	2,70,151	2,88,842	77,394	3,66,236
	Central	4,63,929	4,78,248	1,17,094	5,95,342
	Southern	(a) 5,32,074	5,63,168	1,14,182	6,77,350
	Total ..	(a) 12,66,154	13,30,258	3,08,670	16,38,928
Net result	Northern	+ 1,68,529	+ 68,890	+ 18,943	+ 87,833
	Central	+ 2,37,926	+ 2,23,031	+ 45,226	+ 2,68,257
	Southern	(a) + 21,606	− 44,967	+ 15,767	− 29,200
	Total ..	(a) + 4,28,061	+ 2,46,954	+ 79,936	+ 3,26,890

(a) The figures in the last annual report have since been reduced by the Accountant-General—*vide* his letter in Government Order, dated 2nd September 1893, No. 3236.

68. For purposes of comparison, the figures of the twelve months ending 31st March 1893 are shown separately. The variations both in the revenue and expenditure have been explained in paragraphs 5 to 8, chapter I, of Board's Proceedings, dated 31st October 1893, Forest No. 744, submitting to Government the budget estimates of receipts and charges for 1894–95. It will suffice here to say that the revenue for the first twelve months of the period under report showed a decrease of Rs. 1,17,000, while the expenditure showed an increase of about Rs. 5,000 under "A. Conservancy and Works" and about Rs. 59,000 under "B. Establishments." The decrease in the revenue is chiefly in the Northern and Southern Circles, and is due to the following causes :—

(*a*) Scarcity during the first three moths of the year in *Kurnool* which led to reduced demand for forest produce and the subsequent heavy rains which prevented larger removals.

(*b*) Short removals of produce in *Godavari* and *Kistna*.

(*c*) The restriction placed on the cutting of Tangedu (*Cassia auriculata*) in *Anantapur*.

(*d*) Less demand for Sandúr hill grass in *Bellary*.

(*e*) Smaller quantities of timber sold departmentally in *South Coimbatore* and *South Malabar*.

(*f*) Less demand for firewood in *Madura*.

(*g*) Smaller collection of sandalwood in *North Coimbatore*, and

(*h*) Failure of the cardamom crop in *South Coimbatore*.

69. The increase under "A. Conservancy and Works" is mainly due to increased expenditure (1) on demarcation, consequent on the larger amount of work done in several districts; (2) on compensation for acquiring some of the rokkadayam trees in Nellore, and (3) on surveys, owing to a larger staff of surveyors and draughtsmen employed to facilitate the work of Forest settlement in several districts.

70. The increase under "B. Establishments" is mainly due to the disbursement of (1) the pay and allowances of the third Conservator for the whole year instead of for

a portion only as in the previous year; (2) the arrears of pay to the Controlling staff, which was reorganized in 1892–93, with retrospective effect from October 1891; and (3) the cost of supplying Forest Guards' uniforms to a larger number than in 1891-92.

71. The net surplus was about $2\frac{1}{2}$ lakhs at the end of March 1893, but taking the figures of 15 months into consideration, the surplus amounted to over $3\frac{1}{4}$ lakhs. Looking at the individual Circles, it will be seen that while the Northern and Central Circles showed surplus balances, there was a large deficit in the Southern Circle.

CHAPTER VII.

General Remarks.

72. *Forest School.*—The number of officers deputed to undergo training in the Dehra Dun Forest School from each circle is shown in the margin.

Circle.	Number deputed in June 1892.	Number deputed in June 1893.
Northern	1	2
Central	6	3
Southern	6	3
Total ...	13	8

The total number of trained men in the department exclusive of those still under training in the school was 48. Eleven of these were in the Northern Circle, viz., 2 Extra Assistant Conservators, 7 Rangers and 2 Foresters. In the Central Circle there are 18 trained men—2 Extra Assistant Conservators, 11 Rangers and 5 Foresters. In the Southern Circle there were one trained Extra Assistant Conservator, 2 trained Sub-Assistants, 8 Rangers and 8 Foresters.

73. *Conduct of Establishment.*—In the *Northern Circle* two Foresters—one in Ganjám and the other in Kurnool—were dismissed for falsifying records, one Forester was suspended for misappropriation of Government money and was undergoing trial at the close of the period under report; one was permitted to resign his appointment for bad work, and the services of four acting Foresters were dispensed with for incompetency. In the *Central Circle* one Ranger was reduced. One Forester was dismissed, two were reduced and two suspended for misconduct. In the *Southern Circle* two Rangers were reduced, one Forester was dismissed, another absconded to escape prosecution, and one resigned to avoid punishment.

The number of guards dismissed, reduced or suspended was much the same as usual.

74. *Health of the Establishment.*—The health of the subordinate establishment has been generally bad in all the districts of the Northern Circle except Anantapur; in the Cuddapah, Salem and Trichinopoly districts of the Central Circle; and in the North Coimbatore, Madura and Tinnevelly districts of the Southern Circle.

Two Foresters in the Northern Circle and one Forester and one Supervisor in the Southern Circle are reported to have died of fever and one Forester in Bellary resigned from ill-health.

75. *Elephants.*—Nine wild elephants were captured in the Southern Circle, but three subsequently died. The total number of elephants in the various circles and the number actually employed for inspection purposes, dragging timber, &c., is shown below:—

Circle.	Total number of elephants.	Number actually employed.
Northern	3	2
Southern	21	15

76. *Inventory of valuable stock.*—The inventory of valuable stock prescribed in Government Order, dated 18th September 1893, No. 920, Financial, will be furnished in future reports.

APPENDIX A.

Forest Settlement.

District.	Under settlement up to 1891–92.		Added during 1891–92.		Added during 1892–93 (from 1st April 1892 to 30th June 1893).		Total under Settlement.	
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
1	2	3	4	5	6	7	8	9
Northern Circle.		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Ganjám	41	532	3	3	15	25	59	560
Vizagapatam	6	14	5	67; a+ 15	13	207	24	303
Godávari	77	1,054	..	b — 38	..	b — 3	77	1,013
Kistna	65	687	..	a— 18; —b 1	37	65; a— 3	102	730
Anantapur	45	277	..	a+ 76; c+ 1	8	15; a+ 39; a— 7; b— 1	53	400
Bellary	65	320	10	24; a+ 9; c— 1	44	94; a— 1	119	445
Kurnool	15	1,884	5	24; a—144	13	141; a+ 2	33	1,907
Total ...	314	4,768	23	17	130	573	467	5,358
Central Circle.								
Nellore	123	577	..	a — 5	..	a+ 2; b— 4	123	570
Cuddapah	109	1,838	..	a + 6	18	96; a+ 38; a— 14	127	1,964
Chingleput	91	161	23	19	42	17	156	197
North Arcot	94; f + 1	873	5	23; a— 5	16; d— 1	85; a+ 21; b— 1; d— 2	115	994
South Arcot	113	659	..	b — 9	57	155; b— 3	170	802
Tanjore	24	19	..	..	d— 1	..	23	19
Trichinopoly	74; d— 2	197	19	9; a+ 1	f + 5	a+ 5; b— 1; d— 11	96	200
Salem	126	1,116	2	62; b— 1	..	..	128	1,177
Total ..	753	5,440	49	100	136	383	938	5,923
Southern Circle.								
Madura	81	476	..	a+ 26; a— 21	76	144	157	625
Tinnevelly	39	589; a—178; f —1	...	..	..	..	39	410
North Coimbatore	13; e— 3	1,278	51	317; a— 3; b— 8	3	20	64	1,604
South Coimbatore	10	566	..	..	4	8	14	574
Nilgiris	126	311	7	1	9; d— 1	16	141	328
North Malabar	13; d — 2	261	..	..	..	..	11	261
South Malabar	21	299	..	a + 1	..	..	21	300
South Canara	27	152	..	a — 11	1	1; a— 7	28	135
Total ..	325	3,753	58	302	92	182	475	4,237
Grand Total ..	1,392	13,961	130	419	358	1,138	1,880	15,518

a. Rectification of area. *b*. During settlement. *c*. Transferred to Anantapur district. *d*. Unreserved or abandoned.
e. Due to separation or disafforestation or clubbing of blocks. *f*. Wrong entry in previous returns.

APPENDIX A.

Forest Settlement—*cont.*

FINALLY notified and constituted reserved forests.

	Up to 1891-92.		During 1891-92.		During 1892-93, (from 1st April 1892 to 30th June 1893).		Total.	
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
	10	11	12	13	14	15	16	17
Northern Circle.		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Ganjám	8	85	1	29	..	..	9	114
Vizagapatam	1	4	..	* + 10	4	10	5	24
Gódávari	34	345	8	73	2	24	44	442
Kistna	44	346	10	106	7	183 * — 2	61	633
Anantapur	5	14	3	5 † + 1 * + 11	17	70	25	101
Bellary	25	77	10	29 † — 1	26	109	61	214
Kurnool	3	242	7	826	4	658	14	1,726
Total ..	120	1,113	39	1,089	60	1,052	219	3,254
Central Circle.								
Nellore	88	169	17	94	11	78	116	341
Cuddapah	20	356	13	58	37	551	70	965
Chingleput	59	126	13	20	13	9	85	155
North Arcot	50	430	16	83	22	175	88	688
South Arcot	44	148	12	16	37	221	93	385
Tanjore	17	9	1	·03	2	7	20	16·03
Trichinopoly	39	141	27	18	6	31	72	190
Salem	78	684	6	78	22	205	106	967
Total ..	395	2,063	105	367·03	150	1,277	650	3,707·03
Southern Circle.								
Madura	73	379	6	109 * — 21	5	12	84	479
Tinnevelly	29	428	9	139	1	21 * — 178	39	410
North Coimbatore	6 ‡ — 3	119	3	369 * — 3	39	12	45	497
South Coimbatore	10	566	..	..	..	..	10	566
Nilgiris	53	201	42	6	27	26	122	233
North Malabar	7	119	..	..	1	32	8	151
South Malabar	6	39	..	..	..	..	6	39
South Canara	16	85	2	8	4	7	22	100
Total ..	200 ‡ — 3	1,936	62	607	77	— 68	336	2,475
Grand Total ..	712	5,112	206	2,063·03	287	2,261	1,205	9,436·03

* By revised estimate or correction of area. † Transferred to Anantapur.

‡ Due to separation or clubbing of blocks.

APPENDIX A.

Forest Settlement—*cont.*

STATEMENT of balance of lands still under settlement.

	Of lands in																		Total balance.	
	1884-85.		1885-86.		1886-87.		1887-88.		1888-89.		1889-90.		1890-91.		1891-92.		1892-93.			
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Northern Circle.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.
Ganjám	23	394	3	22	..	..	..	..	..	..	..	..	6	2	3	3	15	25	50	446
Vizagapatam	..	..	..	..	..	..	..	..	..	..	1	5	..	..	5	67	13	207	19	279
Gódávari	..	..	2	182	1	8	2	19	..	..	27	329	1	33	..	..	..	..	33	571
Kistna	..	..	..	..	..	..	..	..	..	..	2	21	2	14	..	..	37	62	41	97
Anantapur	1	34	..	..	10	149	7	88	2	13	..	..	..	..	..	..	8	15	28	299
Bellary	10	70	..	..	..	..	..	..	3	50	..	..	..	..	2	16	43	95	58	231
Kurnool	..	..	..	..	..	..	1	15	..	..	..	..	..	..	5	25	13	141	19	181
Total ..	34	498	5	204	11	157	10	122	5	63	30	355	9	49	15	111	129	545	248	2,104
Central Circle.																				
Nellore	2	67	*a* 3	*a*130	2	32	..	..	..	..	..	..	..	..	..	..	..	..	7	229
Cuddapah	15	612	..	..	24	267	..	..	..	..	..	..	..	..	..	..	18	120	57	999
Chingleput	..	..	..	..	..	..		..	..	..	4	4	4	2	21	19	42	17	71	42
North Arcot	..	..	..	..	..	..	3	90	..	..	6	114	2	17	..	..	16	85	27	306
South Arcot	..	..	4	54	1	3	1	4	1	7	..	..	13	194	..	..	57	155	77	417
Tanjore	..	..	..	..	..	..	1	3	2	38	..	..	..	..	..	..	..	..	3	3
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	10	..	..	24	10
Salem	2	12	1	16	..	..	3	8	5	53	3	16	6	40	2	65	..	..	22	210
Total ..	19	691	8	200	27	302	8	105	8	60·38	13	134	25	253	47	94	133	377	288	2,216·38
Southern Circle.																				
Madura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	73	146	73	146
Tinnevelly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore ..	..	..	..	..	..	..	1	280	..	..	..	..	3	502	12	305	3	20	19	1,107
South Coimbatore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	8	4	8
Nilgiris	..	..	1	64	..	..	..	..	..	..	5	13	..	..	4	2	9	16	19	59
North Malabar	*a* 2	70	*a* 1	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	110
South Malaber	..	..	..	..	..	..	10	19	5	242	..	..	..	..	..	..	..	..	15	261
South Canara	..	..	2	29	..	..	..	..	..	..	3	5	..	..	..	..	1	1	6	35
Total ..	2	70	4	133	..	..	11	299	5	242	8	18	3	502	16	307	90	191	139	1,762
Grand Total ..	55	1,259	17	537	38	459	29	526	18	365·38	51	507	37	804	78	512	352	1,113	675	6,082·38

a. These are correct figures as now reported by the Collector.

APPENDIX A.

Forest Settlement—*cont.*

Statement of balance of lands still under settlement—*cont.*

	Classification of balance under columns 36 and 37.											
	Settled and reported on.								Settled, but not reported on.		Settlement proceeding.	
	Notified under section 16 during 1892–93, but with effect only from 1893–94, *i.e.*, after 30th June 1893.		With Board or Government awaiting publication of notification under section 16.		Returned by the Board for revision and remaining either with Collector, District Forest officer or Forest Settlement officer.		Total settled and reported on.					
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
	38	39	40	41	42	43	44	45	46	47	48	49
Northern Circle.		S. MLS.		S. MLS.		S. MLS.		S. MLS.		S. MLS.		S. MLS.
Ganjám	..	..	1	4	20	344	21	348	17	55	12	43
Vizagapatam	..	..	3	30	..	..	3	30	1	10	15	239
Gódávari	6	56	2	15	..	..	8	71	21	280	4	220
Kistna	..	..	..	..	..	..	..	..	4	26	37	71
Anantapur	6	52	9	123	1	7	16	182	6	103	6	14
Bellary	4	27	2	33	6	58	12	118	2	7	44	106
Kurnool	..	..	..	..	..	..	..	..	1	15	18	166
Total ..	16	135	17	205	27	409	60	749	52	496	136	859
Central Circle.												
Nellore	1	2	..	..	..	..	1	2	6	227	..	..
Cuddapah	27	106	6	59	15	642	48	807	3	17	6	175
Chingleput	9	8	1	2	..	..	10	10	2	1	59	31
North Arcot	6	114	6	95	1	27	13	236	2	19	12	51
South Arcot	5	20	..	..	4	17	9	37	23	124	45	256
Tanjore	1	3	..	..	..	..	1	3	..	..	2	·38
Trichinopoly	..	..	..	..	..	..	..	..	..	..	24	10
Salem	4	19	2	19	7	59	13	97	6	94	3	19
Total ..	53	272	15	175	27	745	95	1,192	42	482	151	542·38
Southern Circle.												
Madura	12	13	..	..	..	..	12	13	6	6	55	127
Tinnevelly	..	..	..	..	..	..	..	..	..	..	..	..
North Coimbatore ..	5	300	3	4	1	44	9	348	7	739	3	20
South Coimbatore ..	..	..	..	..	..	..	..	..	..	..	4	8
Nilgiris	6	10	1	..	..	..	7	10	3	16	9	69
North Malabar ..	..	..	..	..	..	..	..	..	3	110	..	..
South Malabar ..	..	..	..	..	..	..	..	..	15	261	..	..
South Canara	3	5	..	..	..	..	3	5	3	30	..	..
Total ..	26	328	4	4	1	44	31	376	37	1,162	71	224
Grand Total ..	95	735	36	384	55	1,198	186	2,317	131	2,140	358	1,625·38

APPENDIX B.

Causes of delay in the submission of final notifications of forest reserves.

Districts.	Causes of delay.															
	Notified under section 16 during 1892–93, but with effect only from 1893–94, *i.e.*, after 30th June 1893.	With Board or Government awaiting publication of notification under section 16.	Pending preparation of maps and completion of demarcation.	Awaiting disposal of appeals.	Awaiting carrying out of exchanges of lands.	Only recently notified under section 4.	Awaiting payment of compensation.	Awaiting settlement of claims under enquiry.	Awaiting District Forest-officer's answers to claims, preparation of boundary descriptions and acquisition of lands, &c.	Settled, but final report pending with the Collector or under preparation.	Pending revision of notifications.	Awaiting replies to references made to Collectors and Board.	Awaiting cancellation of the initial notification.	Awaiting inspection by the Forest Settlement-officer.	Other causes, *i.e.*, awaiting return of records from District Courts, awaiting information from Tahsildars, &c.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Ganjám	..	1	..	..	..	..	..	13	4	9	17	..	2	4	..	50
Vizagapatam	..	3	1	..	..	9	..	4	..	2	..	..	..	..	..	19
Gódávari	6	2	10	3	..	..	..	1	..	8	..	1	..	..	2	33
Kistna	..	..	1	1	..	8	..	12	..	..	..	..	..	15	4	41
Anantapur	6	9	2	..	2	5	..	1	..	2	1	..	..	..	..	28
Bellary	4	2	..	2	..	43	..	..	..	6	1	..	..	..	..	58
Kurnool	..	..	..	..	..	3	..	..	..	..	..	..	..	16	..	19
Nellore	1	..	3	2	..	..	..	1	..	..	..	..	..	..	..	7
Cuddapah	27	6	17	..	1	..	..	4	..	1	..	..	..	..	1	57
Chingleput	9	1	..	..	..	..	..	14	..	6	..	..	..	41	..	71
North Arcót	6	6	..	..	1	1	..	..	..	1	1	..	..	11	..	27
South do.	5	..	2	..	..	9	..	11	9	1	..	..	..	38	2	77
Tanjore	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	3
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	24	..	24
Salem	4	2	1	8	..	..	..	..	..	7	..	..	..	..	..	22
Madura	12	..	..	..	..	..	..	19	26	14	1	..	..	1	..	73
North Coimbatore	5	3	..	..	3	3	..	..	..	5	..	..	..	..	..	19
South do.	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	4
Nilgiris	6	1	..	..	..	..	4	..	..	1	..	6	..	1	..	19
North Malabar	..	..	..	2	..	..	..	..	1	..	..	..	..	..	..	3
South do.	..	..	..	15	..	..	..	..	..	..	..	..	..	..	..	15
South Canara	3	..	1	..	..	..	..	1	..	1	..	..	..	..	..	6
Total	95	36	38	35	7	81	4	81	40	64	21	7	2	155	9	675

APPENDIX C.

RESERVED lands not under settlement in square miles.

District.	Up to 1891–92.	Added during 1891–92.	Added during 1892–93 (April 1892 to 30th June 1893).	Total.	Transferred for settlement.				Balance remaining reserved lands not under settlement.
					Up to 1891–92.	During 1891–92.	During 1892–93 (1st April 1892 to 30th June 1893).	Total.	
1	2	3	4	5	6	7	8	9	10
Northern Circle.									
Ganjám	548	3	15	566	532	3	25	560	6
Vizagapatam ..	14	82	207	303	14	82	207	303	..
Gódávari	1,054	*b* — 38	*b* — 3	1,013	1,054	*b* — 38	— 3	1,013	..
Kistna	687	*a* — 18 *c* — 2 *b* — 1	190 *a* — 1	855	687	*a* — 18 *b* — 1	65 *a* — 3	730	125
Anantapur	277	*a* + 77	15 *a* + 39 *a* — 7 *b* — 1	400	277	*a* + 77	15 *a* + 39 *a* — 7 *b* — 1	400	..
Bellary	382	24 *a* + 9 *c* — 1	94 *a* — 1	507	320	24 *a* + 9 *c* — 1	94 *a* — 1	445	62
Kurnool	1,884	24 *a* —144	141 *a* + 2	1,907	1,884	24 *a* —144	141 *a* + 2	1,907	..
Total ..	4,846	15	690	5,551	4,768	17	573	5,358	193
Central Circle.									
Nellore	596	*a* — 5	*a* + 2 *b* — 4	589	577	*a* — 5	*a* + 2 *b* — 4	570	19
Cuddapah	2,018	*a* + 6	12 *a* + 45 *a* — 14	2,067	1,838	*a* + 6	96 *a* + 38 *a* — 14	1,964	103
Chingleput	182	13	17	212	161	19	17	197	15
North Arcot	894	23 *a* — 5	66 *a* + 21 *b* — 2 *d* — 2	995	873	23 *a* — 5	85 *a* + 21 *b* — 1 *d* — 2	994	1
South Arcot	810	*a* — 9	7 *a* — 6	802	659	*b* — 9	155 *b* — 3	802	..
Tanjore	25	..	..	25	19	..	..	19	6
Trichinopoly ..	236	9 *a* + 1	*a* + 5 *b* — 1 *d* — 11	239	197	9 *a* + 1	*a* + 5 *b* — 1 *d* — 11	200	39
Salem	1,254	36 *a* — 1	.. *c* + 1	1,290	1,116	62 *b* — 1	..	1,177	113
Total ..	6,015	68	136	6,219	5,440	100	383	5,923	296
Southern Circle.									
Madura	493	*a* + 26 *a* — 21	139	637	476	*a* + 26 *a* — 21	144	626	12
Tinnevelly	589 *a* — 178	..	..	411	589 *a* —178 *b* — 1	..	..	410	1
North Coimbatore ..	1,949	13 *a* — 3 *b* — 8	15 *d* —222	1,744	1,278	317 *a* — 3 *b* — 8	20	1,604	140
South Coimbatore ..	584	..	8 *a* — 1	591	566	..	8	574	17
Nilgiris	384	1	24 *a* — 1	408	311	1	16	328	80
North Malabar ..	274	..	.. *a* — 2	272	261	..	..	261	11
South Malabar ..	328	..	2	330	299	*a* + 1	..	300	30
South Canara ..	1,024	..	2 *a* — 2	1,024	152	*a* — 11	1 *a* — 7	135	889
Total ..	5,625 *a* — 178	8	— 38	5,417	3,753	302	182	4,237	1,180
Grand Total ..	16,308	91	788	17,187	13,961	419	1,138	15,518	1,669

a. By rectification of area. *b*. During settlement. *c*. Error in previous year's abstracts. *d*. Area unreserved.

APPENDIX D.

STATEMENT showing the number of forest offences reported during the 15 months ending with 30th June 1893 and the particulars of their disposal.

Districts.		Cases pending at the beginning of the period.	Cases reported during the period.	Total number of cases for disposal (columns 2 and 3).	Number of cases withdrawn.	Number of cases compounded.	Number of cases taken into court and dealt with by the Magistracy during the period.	Total number of cases disposed of (columns 5, 6 and 7).	Number of persons concerned in cases disposed of.	Balance of cases undisposed of			Percentage of cases withdrawn to cases disposed of.	Percentage of cases compounded to cases disposed of.	Number of convictions.	Number of acquittals.	Percentage of acquittals to cases disposed of by Magistrates.	Amount of compensation fees realized for cases compounded.
										With Magistrates.	With Forest-officers.	Total.						
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
																		RS.
Ganjâm ..	1891–92 ..	60	140	200	..	..	65	65	217	..	..	135	..	..	53	12	18	250
	1892–93 ..	135	231	366	20	23	149	192	614	..	..	* 174	10	12	90	59	39	239
Vizagapatam ..	1891–92 ..	158	663	821	..	278	453	731	838	..	..	90	..	38	408	45	10	787
	1892–93 ..	90	764	854	7	244	577	828	1,184	..	..	* 26	1	29	530	47	8	635
Gódávari ..	1891–92 ..	69	29	98	..	5	87	92	177	..	..	6	..	5	13	74	85	1,942
	1892–93 ..	6	626	632	..	13	255	268	350	351	13	364	..	5	225	30	12	201
Kistna ..	1891–92 ..	29	501	530	3	171	185	359	1,329	..	..	171	1	48	130	55	30	2,693
	1892–93 ..	171	709	880	31	225	306	562	2,070	..	..	* 318	6	40	251	55	18	2,052
Anantapur ..	1891–92 ..	12	113	125	..	24	63	87	227	..	..	38	..	28	55	8	13	372
	1892–93 ..	38	264	302	..	71	203	274	908	..	..	* 28	..	26	166	37	18	859
Bellary ..	1891–92 ..	2	164	166	..	34	127	161	386	..	..	5	..	21	101	26	20	188
	1892–93 ..	5	360	365	..	31	319	350	837	15	..	15	..	9	260	59	18	542
Kurnool ..	1891–92 ..	19	400	419	..	83	313	396	1,105	..	..	23	..	21	231	82	26	1,346
	1892–93 ..	23	374	397	..	35	353	388	1,331	7	2	9	..	9	215	138	39	675
Nellore ..	1891–92 ..	20	114	134	..	14	98	112	383	..	..	22	..	13	50	48	49	71
	1892–93 ..	22	148	170	5	57	83	145	532	7	18	25	3	39	65	18	22	283
Cuddapah ..	1891–92 ..	22	606	628	..	185	265	450	1,181	..	..	178	..	41	210	55	21	1,538
	1892–93 ..	178	713	891	..	248	363	611	1,197	..	..	* 280	..	41	303	60	16	2,168
Chingleput ..	1891–92 ..	1	174	175	..	..	150	150	252	..	..	25	..	..	95	55	37	23
	1892–93 ..	25	298	323	28	200	93	321	653	2	..	2	9	62	70	23	25	559
North Arcot ..	1891–92 ..	12	700	712	..	504	135	639	1,054	..	..	73	..	79	97	38	28	3,761
	1892–93 ..	73	884	957	54	518	364	936	1,675	21	..	21	6	55	230	134	37	5,221
South Arcot ..	1891–92 ..	360	1,046	1,406	183	478	254	915	2,365	..	..	491	20	52	214	40	16	3,125
	1892–93 ..	491	1,090	1,581	333	543	518	1,394	4,412	72	115	187	24	39	423	95	18	3,268

Tanjore ..	1891-92 ..	12	18	30	..	14	13	27	121	..	..	3	..	52	8	5	38	67
	1892-93 ..	3	56	59	9	30	13	52	175	7	..	7	17	60	9	4	31	1,518
Trichinopoly ..	1891-92 ..	54	949	1,003	..	645	295	940	1,612	..	..	63	..	69	242	53	18	2,188
	1892-93 ..	63	946	1,009	9	741	156	906	1,705	1	102	103	1	82	100	56	36	3,383
Salem ..	1891-92 ..	32	1,116	1,148	61	498	556	1,115	4,710	..	..	33	5	45	435	121	22	4,109
	1892-93 ..	† 32	1,033	1,065	88	302	632	1,022	3,798	43	..	43	9	30	502	130	21	2,274
Madura ..	1891-92 ..	2	28	30	1	6	23	30	94	..	..	..	6	20	13	10	43	99
	1892-93 ..	..	105	105	4	1	89	94	277	..	..	* 11	4	1	40	49	55	15
Tinnevelly ..	1891-92 ..	9	162	171	9	2	145	156	405	..	..	15	6	1	97	48	33	432
	1892-93 ..	† 20	422	442	15	37	380	432	815	..	..	10	3	9	298	82	22	1,349
North Coimbatore.	1891-92 ..	40	181	221	11	96	65	172	670	..	..	49	6	56	31	34	52	1,305
	1892-93 ..	49	329	378	9	172	88	269	871	..	..	* 109	3	64	55	33	38	2,372
South Coimbatore.	1891-92 ..	59	448	507	30	289	142	461	1,396	..	..	46	6	63	119	23	16	1,683
	1892-93 ..	46	438	484	34	238	179	451	1,547	10	23	33	8	53	155	24	13	2,950
Nilgiris ..	1891-92 ..	3	126	129	2	68	23	93	267	..	..	36	2	73	16	7	30	593
	1892-93 ..	36	206	242	19	145	51	215	571	..	27	27	9	67	37	14	27	1,133
North Malabar.	1891-92 ..	..	25	25	..	21	4	25	75	..	..	..	..	84	2	2	50	87
	1892-93 ..	..	64	64	..	37	16	53	100	..	..	* 11	..	70	13	3	19	151
South Malabar.	1891-92 ..	..	18	18	..	..	17	17	46	..	..	1	..	..	12	5	30	..
	1892-93 ..	1	14	15	..	1	14	15	27	..	..	..	..	7	11	3	21	20
South Canara.	1891-92 ..	61	403	464	..	97	318	415	592	..	..	49	..	23	236	82	26	726
	1892-93 ..	49	831	880	31	194	475	700	1,045	135	45	180	4	28	410	65	14	1,626
Total ..	1891-92 ..	1,036	8,124	9,160	300	3,512	3,796	7,608	19,502	..	..	1,552	4	46	2,868	928	24	27,385
	1892-93 ..	1,556	10,905	12,461	696	4,106	5,676	10,478	26,694	..	..	1,983	6·6	39·2	4,458	1,218	21·4	33,493

* The number pending with Magistrates and that with Forest-officers has not been separately shown.

† Correct figure as now reported by the Collector.

APPENDIX E.

STATEMENT showing the area of forest reserves closed to grazing, the area grazed over and the average number of cattle grazed per square mile in 1892–93.

Districts.	Area of reserved forests and reserved lands.	Area closed to grazing.	Area open to grazing.	Area grazed over.	Number of cattle and sheep admitted (*d*).	Average number of cattle and sheep per square mile.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.		
1. Ganjám	567	179	388	not given	15,826	(*a*) ..
2. Gódávari	1,014	not given	not given	294	17,139	(*a*) ..
3. Kistna	855	Do.	Do.	139	44,085	(*b*) 317
4. Anantapur	400	161	239	not given	10,099	(*a*) ..
5. Bellary	506	356	150	102	8,139	(*c*) 80
6. Kurnool	1,906	279	1,627	not given	119,492	(*a*) ..
7. Cuddapah	2,067	..	2,067	Do.	43,240	(*a*) ..
8. Chingleput	212	..	212	Do.	22,677	(*a*) ..
9. North Arcot	996	515	481	Do.	81,447	(*a*) ..
10. South Arcot	802	..	802	Do.	88,765	(*a*) ..
11. Tanjore	24	..	34	Do.	4,107	(*a*) ..
12. Trichinopoly	239	..	239	69	9,553	138
13. Salem	1,290	57	1,233	not given	232,196	(*a*) ..
14. Madura	637	not given	not given	Do.	6,503	(*a*) ..
15. Tinnevelly	411	Do.	Do.	177	19,744	111
16. North Coimbatore	1,744	Do.	Do.	not given	188,650	(*a*) ..
17. South Coimbatore	591	33	558	Do.	76,727	(*a*) ..
18. Nilgiris	408	..	408	Do.	11,244	(*a*) ..

NOTE.—In Vizagapatam, North and South Malabar, the demand for grazing in forest reserves was very limited as large areas outside were available for free grazing. In Nellore and South Canara, grazing was leased out.

(*a*) Accurate information is not available. (*b*) Grazing is better regulated here than elsewhere.

(*c*) Sufficient pasture was available outside the reserves on account of good rains.

(*d*) Most of the Collectors have not reported the number of sheep separately from that of cattle.

APPENDIX F.

NATURAL AND ARTIFICIAL REPRODUCTION—IMPROVEMENT, FELLINGS, EXPERIMENTS AND EXOTICS.

NORTHERN CIRCLE—(EXTRACTS FROM CONSERVATORS' REPORTS).

(E) *Natural reproduction.*

34. *Ganjám.*—In Goomsur, the reproduction of the chief tree, sâl, is all that can be wished There is an abundance of seedlings even in the unprotected blocks. On the Mohiri hills, in the Berhampur range, reproduction continues to be discouraging chiefly owing to the reckless cutting in former years. The only hope for restoration on these hills is to close large area to all cutting and grazing, but it was found impossible during the year to carry out this work, for to nominally close a forest without proper means of making the closure effective, would be worse than useless.

Vizagapatam.—The reproduction in the Peddapalli reserve as a result of continuous protection is very satisfactory, and there is a most marked contrast between its condition now and three years ago. In Palkonda, similarly in the 50 square miles of reserves on the hills facing

the northern portion of the ordinary taluk, with the combined effect of good seasons and absence of fires, the growth is everywhere luxuriant. The sâl seeding season has not turned out a good one. This is unfortunate, for the abundant rain of the present monsoon would have been most favorable.

Gódávari.—The natural reproduction of valuable trees both from seed and coppice is excellent in the upper taluks. The well-grown poles of teak and *Anogeissus latifolia* are specially remarkable in the Mittapalli reserve. The soil and reproduction in the Papikonda reserve are good. The present growth, except in the plateau itself, forms a dense cover overhead. In the delta range, especially in the Coringa reserve, the parts nearer the main land are said not to reproduce so well as formerly owing to the surplus of fresh water introduced by the system of irrigation. This is also said of Upputeru. The growth in both reserves, though much larger, is not so valuable as in Kandikuppa where the mangrove is pure and not mixed with *avicennia* and other inferior species as in other two reserves. In the Yernagudem reserve abundant reproduction was noticed from coppice of réla (*Wrightia tinctoria*), *Diospyros melanoxylon* and *Strychnos nux-vomica* and at the same time a marked absence of seedlings. In the old Podu of Bavinikulapadu reserve, a good reproduction was also noticed from coppice of *Soymida febrifuga*, *Chloroxylon swietenia*, *Terminalia tomentosa* and *Strychnos nux-vomica*.

It is to be regretted that a special report has not been made on the regrowth in Bhadráchalam, for the stock of large timber is elsewhere reported to have been almost worked out.

Kistna—Seedlings.—The young yepi (*Hardwickia binata*) is coming prolifically in some parts of Bollapalli reserve closed to grazing and strictly fire-protected. In the Mutukur reserve, on the other hand, where protection from grazing and fire was introduced, there are no young seedlings.

Prickly-pear in the salt marshes appears to be of great assistance to the seedlings of jungle trees and the formation of scrub jungles on the most desolate wastes. On the barren sand Yilakurru (sudda) and prickly-pear first take root and between them seem to absorb the salt from the marshes to bind the sand and to form a soil with their own débris in which seeds of fresh trees germinate and flourish until a regular scrub is formed, consisting of *Melia*, *diospyros*, *Chloroxylon*, *Acacias*, *Albizzias*, *Sapindus*, and sometimes dates and palmyras. The whole transition from barren "Parra" (marshes) to scrub jungle 20 feet high is to be seen in the waste land of Potumeraka village, Répalle taluk.

Flowering and fruiting.—Taking it all round, the past year was a bad season for flowering and fruiting. Under the head of minor produce there was a loss on this account, as mangoes, tamarind, babul and soap-nuts in some places gave a short crop. With regard to forest trees proper, *yepi* (*Hardwickia*) was neither seen in flower nor fruit, whilst *Chloroxylon swietenia*, *Melia* and *Pongamia* produced a prolific crop of flower and fruit.

Coppice.—In the Nidamarru reserve, coppice shoots from the stools of babul trees felled in January had by March reached a height of from 1½ to 2 feet. A sample area cut at Pliligundla in Bollapalli reserve in 1891 showed in January 1893 coppice shoots of yepi of an average height of 4 feet.

Situation of certain trees.—From the sample areas taken in the Bollapalli and Mutukur reserves it was found that *Swietenia* and *Anogeissus* grow in greatest numbers on the top of the hills, yepi (*Hardwickia*) on the lower slopes and *Albizzia amara* on the plains. Yepi seems to prefer shales to other soils.

Rates of growth.—A few samples of *Hardwickia* and *Chloroxylon* gave the following statistics:—

Diameter.	Rings (average).	
	Hardwickia.	Chloroxylon.
2½ inches	...	25
3 „	20	29
3½ „	...	33
4 „	20	...
4½ „	...	32
5 „	...	38
6 „	...	36
8 „	36	...

The rate of growth of babul in Nidamarru reserve has been shown in chapter III. An examination of numerous specimens of mangrove showed 25·7 rings per inch of radius on the average. The "Indian Forester" addressed on the subject explained that there were spurious rings. From numerous inquiries later on in various localities, information was given showing that, on the average, mangrove grows from 2 to 3 feet in height per annum and from ⅓ to 1 inch diameter.

Record of notes.—A Flora of the Kistna district was started by Mr. Alwar Chetty and continued by Mr. Lushington, in which notes of the above kind are recorded.

Kurnool.—In parts of the fire-protected blocks of the Nallamalais, reproduction is satisfactory especially on the banks of streams and in low-lying moist localities. In the open portions there are large numbers of young plants appearing as seedlings at first sight, but are, on closer inspection, found to be stool shoots and root-suckers, the latter predominating and are in a great measure the result of the annual fires, but they are very short-lived, flourishing until the following season's fires (which, it may be here remarked, take place with the utmost regularity) when they are almost entirely destroyed, giving place, however, to a fresh crop shortly after the fires have passed over the ground. This state of things goes on year after year without intermission, so that the present condition of the forests generally is scarcely such as could be desired.

With a large population of Chenzus domiciled in a forest of immense area, in which the grass grows to a height of 5 feet and more, it is almost impossible to exclude fires, especially as the Chenzus are the most impracticable forest tribe in the Presidency. There has been general seeding of *Lendrocalamus strictus* in the Sirvel, Nandyal and Nandikotkur ranges. The seed has germinated most profusely, so that the fresh generation will, in all probability, far exceed in density the parent clumps. In the Yerramalais, little or no reproduction has been noticed, but this is probably due to the excessive grazing and to an absence at present of a sufficiently rigid protection against cattle trespass.

Bellary.—Reproduction of *Hardwickia binata* in the Mallapanagudi block was satisfactory and there are numerous seedlings. The bark of this species was being eaten away by white-ants, and with the approval of the Conservator orders were issued to scrape down the white-ants and apply kerosine-oil solution to the bark. This is being tried. On account of effective protection, reproduction in most cases, notably in Adóni, West and East, and Ganekallu in the Adóni taluk, was encouraging.

In the Sandur range, reproduction in the Northern slopes of Ramandrug is specially good. In other parts of the Droog the seedlings are scattered in valleys. The coppice shoots from stools in some of the compartments, where operations had been carried out, continue to flourish. The coppice reproduction in sample acres of the Ramandrug forest felled for the purpose of collecting statistics is fair. In the other two ranges it is not satisfactory, but possibly better than in the previous year.

Anantapur.—Reproduction in this district is backward owing to extreme dryness and to want of cover. The chief timber tree of the present and future is yepi (*Hardwickia binata*), with which the District Forest-officer has been making experiments. The tree bears seed abundantly, and the seeds generally germinate and may be found as seedlings in Muchukota and other yepi forests, comparatively thick, soon after the rains. They dry down and disappear in the following hot weather, but apparently do not, at least not all of them, for seedlings of three or four years were found and that had dried down each year as could be ascertained from the gnarled and twisted appearance of their stems at ground level. It is believed that if they had shade in the hot weather, the seedlings would establish themselves without any difficulty and that even under present conditions they will in time establish themselves, for they are enlarging their root system and coming up more vigorously every year.

A small experiment was tried in Somandapalli reserve near Penukonda, and yepi, tangedu, and castor seeds were sown in little patches fencing the plot with thorns and beyond that they were not nursed in any way. The castor was sown to give some shade to the young seedlings, but unfortunately they no sooner came up than they were devoured by a caterpillar. The tangedu came up very well and the yepi fairly well, but it all disappeared before the end of the hot weather. A few of the seedlings, however, have sprouted again, and are at the present moment growing vigorously; it remains to be seen whether they will establish themselves or die out.

Yepi is generally found pure often on the very driest soil and more often on a south and south-west than on a north and north-east aspect. It sheds its leaves during the hot weather, but this year the leafless period among the trees near Bukkapatnam did not last more than a fortnight, while at Muchukota it lasted for from six weeks to two months. The trees cut at Muchukota have been coppiced in past years and those at Bukkapatnam pollarded for their leaves and fibre, so that there is scarcely a sound seedling tree in the district and the people scarcely seem to recognise it as a timber tree at all.

(F) *Artificial reproduction.*

The addition during the year to plantations, topes and cultural operations, were respectively 5, 25 and 34¼ acres and the expenditure incurred amounted to Rs. 6,782 (according to the Accountant-General's statement, but Rs. 6,520 according to the district figures) against Rupees 5,485 incurred in the previous year. The additions made were petty and are not noteworthy. The increase in the expenditure accounts for the extension of the operations for 15 months. The progress in the districts is, however, noticed below :—

Ganjám.—Sanction was received too late to start the Agusti Nowgam Casuarina Plantation, but a nursery was made. It has 2 lakhs of seedlings ready for transplantation during the rains of 1893. The miscellaneous plantings done during the year were planting 7,000 casuarina seedlings in the Chatrapur reserve and 10,000 palmyra seeds in Chatrapur, Ballipagada and Podara reserves. The casuarinas were planted in the Chatrapur reserve in August 1892. No watering was done after planting, and at the end of the hot season of 1893, 3,000 plants were living which gives an expenditure of Rs. 10 an acre of successful planting. The season, however, was an exceptionally favorable one as there was plenty of rain during the hot weather. This experiment is being continued and is carefully watched. The great expense of regular plantations is of course the watering, and if fair results can be obtained without watering, it will be a decided step in advance.

Vizagapatam.—During the year two topes, which were previously protected at no special cost, were extended and notified preliminarily under section 4. Since November a gardener for each has been put on. The topes in question have been fenced. 10,000 palmyra seeds put down in these have come up exceedingly well, but of the 2,000 teak seeds put down only half have germinated. In addition to these, a nursery was laid out in the Chinnamangalapuram tope and filled with seeds of *Sál terminalia*, *Anogeissus*, *Ironwood soymida*, *Lebedicropsis* and other species as an experiment.

Gódávari.—In the Narsapur plantation, 1,400 casuarina seedlings were transplanted from the nursery beds and the area planted being 3 acres. No work was done in the Bendamurlanka plantation, as the seedlings were mischievously destroyed. A working plan was sanctioned for the former. There are neither topes nor cultural operations.

Kistna.—There was a great mortality among the casuarinas of Bápatla and Gudivada taluks from drought. The seedlings of Vedullapalli reserve completely withered away and full-grown trees died in Wadarevu, Bomminapad, Vanudhuru and Allinagaram plantations. The Casuarina Kara Plantation was entirely destroyed by a borer caterpillar and the trees had to be sold "*en bloc*" standing. More than 95 per cent. of the trees were attacked and it was useless to leave the others. It is proposed to re-stock the area (only 21 acres) with cashew-nut instead of casuarina, as this is likely to pay better for such a small area and a change of crop is desirable. The plantation of *Eugenia* and *Terminalia arjuna* in Weld reserve has not been a success, but the *Dalbergia* ("*Sissu*") planted two years later is thriving and outtops the *Eugenia* and *Terminalia arjuna*. The growth of sissu is most encouraging and it may almost be taken as settled that this tree can be established as a paying crop in this locality. Teak, yepi and other seeds were planted in the blanks caused by last year's failures in the Bezwada reserve at a cost of Rs 135.

Kurnool.—By way of experiment bamboo seedlings were planted 500 at Pudur and 500 at Tekulakonda. 200 of the former and 150 of the latter are reported to be in good condition. Some grown to a height of 2 to 3 feet, and the rest destroyed by porcupines. Of the broadcast sowings of 1889–90 about 250 plants of an average height of 7 to 8 feet are to be seen in Tuvakonda, part of the Jaladurgam reserve, while a few of the same year's sowings are also visible in Tekulakonda of an average height of 6 feet. The cost incurred on these two plantations was Rs. 76.

Bellary.—The notes under this head have better come under "experiments and exotics."

Anantapur.—No planting was undertaken during the year.

(G) *Works of improvements.*

36. *In Ganjám.*—Creepers were cut over an area of 690 acres in the Chandragiri and 1,321 in the Gullery reserves at an average cost of As. 2–9 per acre.

In *Vizagapatam*, *Godávari*, *Kurnool* and *Bellary* none were carried out. In *Kistna* creeper-cutting in previous years did not seem to be so successful as its cost should justify. Seigniorage is levied on creepers and it is proposed to try the effect of removing the seigniorage in certain areas. It is doubtful whether any real good can be expected by removing the prickly-pear in the Muthayapalem reserve, at all events sufficient good to justify the cost. Better trees already appear to dominate it, and as the forest grows thicker and thicker the chances are that the prickly-pear will become less and less.

In *Anantapur.*—Prickly-pear was cleared over an area of 10 acres of Khojjepalle at a cost of Rs. 120. Except in a few instances it is considered premature to begin even improvement cuttings yet, as all the cover available on the ground should be necessarily kept.

37. *Fencing.*—In Ganjám 14 miles of fencing with screwpine was done during the year at a cost of Rs. 180. The Ballipagoda reserve was completely fenced and a greater portion of Chatrapur block No. 2.

In *Vizagapatam*, the Chinna Mangalapuram tope was fenced with a bank and ditch planted with aloe seedlings at a cost of 2 annas per yard (1,390 yards). The Garugupalli tope was also partially fenced at As. 2–3 per yard (81 yards).

The Bezwada reserve was fenced with a trench and mound and prickly-pear at a cost of Rs. 376 and the gaps made by the rains will be repaired from the amount sanctioned. The Nidmarru reserve should be fenced necessarily with screwpine as fellings have taken place to protect the coppice shoots. The Timmapuram tope was also partly fenced.

38. *Improvement thinnings and fellings.*—None were undertaken in the districts of Ganjám, Vizagapatam Godávari and Kistna. In Kistna it is explained that no means exist for exporting the produce if undertaken in Kondavid and Kondapalli which do not contain specially valuable kinds of trees to be ameliorated by the removal of the inferior kinds. It is, however, proposed to stock blanks in the Kondapalli reserve with teak, but the success is doubtful. When demarcation and settlement works are over, some of the yepi pollards in Bollapalli, especially, and also in Mutukur should be removed departmentally to allow space for the growing seedlings to come up. Only a few pollards are required as seed-bearers, for when they seed they do so most prolifically. The pollards are mostly sound trees from 6 inches to 9 inches diameter and not large unsound trunks. In Kurnool, improvement fellings were undertaken in the Bairnuti and North Chelama blocks; 400 acres in the former at a cost of Rs. 707–4–0 and 108 acres in the latter at Rs. 212–9–0. The demand for the produce cut in both was slack owing to its inferiority and the business does not seem to be a profitable one. The whole produce was not sold and the amount realized for the quantity sold was Rs. 457–10–7.

In other districts no operations were undertaken.

The instructions of the Government of India on the subject of improvement fellings are borne in mind and effect is given to them when adequate supervision is possible.

(H) *Experiments and exotics.*

39. The progress made in this direction was as follows:—

Ganjám.—The growth of the date palms planted 3 years ago in Chatrapur reserve is very slow, only a few plants having put on their normally shaped leaves. The great majority is still only about 6 inches high.

Vizagapatam.—Ten thousand palmyra seeds from Sarvasidhi were sown in the Chinna Mangalapuram tope where an experimental nursery was formed, and the following common timber species were raised: teak, sâl, ironwood, *Lebedieropsis* (a very serviceable species producing strong rafters not attacked by whiteants which is found in large quantity in the Palkonda range and coppices luxuriantly) *Scymida* and *Anogeissus*. A register is also maintained recording the date of sowing and of germination of different species and the casualties.

Gódávari.—The Arabian date seedlings planted in previous years in the compounds of Rekapalle and Murmur rest-houses have almost all died out and the few that are surviving are looking very unhealthy; but some of the plants in the Narsapur and Bendamurlanka reserves are in fair condition. The experiment is not on a sufficiently large scale to be of any value.

Kistna.—The mahogany trees of Bezwada reserve flourish. They are now about 12 feet to 15 feet in height and 3 inches diameter at breast height. Some fresh *Swietenia mahogany* were planted—½ lb. in Weld reserve and ½ lb. in Bezwada reserve. Of the former, 18 plants germinated and flourished. A few were afterwards taken in company with various other seedlings of different sorts, about 50 in number, by the Conservator for trial at some of the East Coast Railway stations. In the Bezwada reserve the new mahogany did not germinate.

The teak in Bezwada reserve is thriving well; some of 1 foot height in December were from 3 feet to 4 feet high at the close of the year and some of 4 feet to 5 feet height were 15 feet at the close of the year.

In *Kurnool* and *Anantapur* no progress was made.

Bellary.—Arabian date plants. 25 offsets were received in 1891–92 from Saharanpur and distributed 13 to the Rajah of Sandúr and 12 to K. Narayana Rao; of these, 15 are reported to be doing well. Besides 70 plants of the said species were taken out and given to Narayana Rao, of which 20 are reported in good condition, the rest having died.

During the year 6 lb. of mahogany seeds were received and distributed as follows:—

	LB.
Rajah of Sandúr	½
K. Narayana Rao	½
Mr. R. Sewell	¼
Range officer, Adóni	½
Do, Bellary	½
Do. Sandúr	¾

It was reported that out of 210 seeds sown by Narayana Rao, 200 seeds germinated and were doing well. Those sown by Range officers, Adóni and Bellary, failed, while of those sown in the Ramandrug nursery in April and June 1892, 450 germinated and are reported to be in a flourishing condition. 123 of these are below 6 inches and 327 above 12 inches. 275 are in baskets and are strong and healthy. The seeds given to the Rajah were not sown. Those given to Mr. Sewell were sown in his garden but none of them germinated.

An experimental plantation was made in an acre of red soil area in the Kuppagallu reserve at a cost of Rs. 90. There are about 1,000 plants in it of different species, such as Mangrove, Sissus, Ippi, Nallamaddi, Tellamaddi, Kanaga, Margosa, &c., and they are reported to be in a very healthy condition. The plants are now about 3 feet above the ground. A well was sunk near

the plantation for the purpose of irrigation. Close to this another acre of land was ploughed and the following seeds were sown broadcast: Babul, Bandari, Tangedu, Margosa, Casuarina, &c. Some of them have germinated and are doing well. Among experiments may be mentioned that attention is now being specially directed in Bellary to fostering the growth of the ordinary date, *Phœnix sylvestris*.

CENTRAL CIRCLE—(EXTRACT FROM CONSERVATOR'S REPORT).

(E) *Natural reproduction.*

30. No special measures were undertaken during the period under report to facilitate natural reproduction from seed from the standing mother-trees by opening out the canopy or by clearing undergrowth. Nothing can be undertaken systematically until the subordinate staff is strengthened and the works of selection and demarcation are further advanced.

31. Collectors have contributed general remarks as to natural reproduction, and the following is a summary of the results of observations in the different districts. Reproduction from seed is almost wanting in tracts open to unlimited grazing and has been further prevented during the past year by scanty rainfall. It is worthy of notice that in forests consisting chiefly of *Albizzia amara*, even where grazing is limited, no reproduction takes place and not a seedling can be found. In the Napier, Chamala and Mamandur reserves, North Arcot, sporadic seedlings of *Pterocarpus santalinus*, *Chloroxylon swietenia* and *Hardwickia binata* are increasing. Seedlings of *Bambusa arundainacea* and *Dendrocalamus strictus* from the seeding of last and previous years are coming up in abundance on the Javadi hills, Vellore and Chandragiri taluks, North Arcot district.

Cuddapah.—The compartment coppiced in the Balapalle working circle has reproduced satisfactorily.

Chingleput.—On the slopes in the Nágalápuram and Kambakkam reserves, where there is practically no grazing, natural reproduction is fair and the grass growth has probably preserved many young seedlings during the past three dry seasons. In the Aradur and Sathiavedu reserves, where experimental areas were cut over last season, the coppice is coming on well. Last year an experiment was conducted in the Pulrampakkam reserve of penning goats and feeding them with babul. A large number of seedlings sprang up, but 50 per cent. have since died owing to want of rain.

North Arcot.—It is satisfactory to note that the fencing of three areas in the Javadis last year, to encourage sandalwood reproduction, has been fairly successful; there is no doubt the enemy to its successful natural reproduction is grazing; dibbling in these areas is proposed to be undertaken. In Carnatic Ghur reserve the sowing of patches with sandalwood seed has failed, the site chosen is eminently suited as well as the natural conditions and pitting and sowing in prepared patches will be undertaken this year.

Salem.—The reproduction of sandalwood in the Jowlagiri reserve, which fortunately has been subject to only light grazing, was found by the District Forest-officer to be very encouraging, and this reserve has now been closed altogether to grazing. On the Javadis, as in North Arcot, seedlings were only found in clumps of bamboos where they have escaped cattle.

(F) *Artificial reproduction and cultural operations.*

Casuarina plantations.—No additions were made in the Nellore district. In the Chingleput district 7·6 acres were replanted up in the Maiyur plantation with 12,061 seedlings and the casualties, which amounted to 2,150, have been replaced. Some 2,300 young plants were put out in the Wallajabad tope and are reported doing well. In North Arcot district 133·2 acres of Viringipuram, 133·8 acres in Tiruvallam and 40·9 acres in Amundi plantations have been replanted and blanks in previous year's plantations replaced. Both seedlings and young plants suffer from a fungoid growth and the sapplings and older stems from a borer. I have imported a small quantity of seed from the Tenasserim circle, Burma, and the results will be carefully watched. The plantations made this year are not pure casuarina; a mixture of *Albizzia lebbek*, *Cassia siamia* and *Cæsalpinia coriaria* has been introduced, also over a large portion palmyra seedlings have been planted in sites where casuarina had proved a failure. In South Arcot 10 acres in Tulankoda, 20 acres in Shonankuppam, 10 acres in Doni Durai and 50 acres in Nochikadu were planted with casuarina at a cost of about Rs. 17 per acre with very satisfactory results. Fifty-two acres of the north and south casuarina plantations in the Tanjore district have been planted; over 85 per cent. of the seedlings are thriving. In Trichinopoly 15 acres of the Coleroon padugais and 24 acres of the Cauvery plantations were replanted; in the latter a mixture of *Cassia siamia* has been introduced. An interesting statement appendix has been compiled by the District Forest-officer, Nellore, showing the approximate financial results of the casuarina plantations in the district. The older plantations have entailed an expenditure of Rs. 1,90,688, while revenue already realized and still to be realized will only amount to about Rs. 1,59,400. These were formed under the jungle conservancy, and the cost of planting, &c., was excessive. The plantations formed since 1880 will probably more than cover the outlay, but will yield no large profit, though the price of casuarina has fallen to about one-half of the rate it was a few years ago. The old plantations in the Nellore district present a peculiar appearance; with the exception of round the wells, all the old trees have died.

33. *Other plantations.*—Date plantations at Allipuram, Nellore district. This plantation said to cover an area of 80 acres, has not received the attention it should have. It has been attacked by caterpillars which for a time baffled all attempts to get rid of them. Sulphur reduced to powder eventually proved successful. The small plantation at Sríharikóta has been much damaged by white ants. No additions were made during the period under report.

The following statement shows number of plants and cost :—

Name of plantations.	Description of plants.	Year in which commenced.	Area on 31st March 1892.	Total.	Number of plants alive on 31st March 1892.	Casualties during 1892-93 up to June 1893.	Replaced.	Remainder.	Cost in 1892-93 up to 30th June 1893.	Total cost up to 30th June 1893.
			ACS.	ACS.					RS. A. P.	RS. A. P.
Allipuram Date Plantation ..	Arabian Date	1889-90	80	80	10,800	8,220	..	2,580	374 3 10	1,618 11 1
	Persian Date				1,150	67	..	1,083		
	Egyptial Date	1891-92			2,400	1,000	..	1,400		
Sríharikóta Date Plantations ..	Arabian Date ..	1889-90	20	20	480	357	270	393	66 0 0	231 0 0

The red sanders (*Pterocarpus santalinus*) in the plantation at Kodur, Cuddapah, continues to progress; the trees are 27 years old with an average girth of 22·59 inches, but probably have developed no heartwood yet. The teak in this plantation is a failure as might be expected; the site is unsuited.

In Trichinopoly one acre of the Coleroon plantation was planted with *Inga dulcis* and *Cassia siamia* and over a second acre seeds of the same species were dibbled; the result has not been reported.

The Nursery at Balapalle, Cuddapah, was maintained and 2,809 seedlings of various species were transplanted from it into the Balapalle working circle and the Mojilipenta forest. It is too early to report results.

Pit planting of bamboos from nurseries made last year in Chittoor, Banavaram and Palamedi reserves, North Arcot, have been most successful; about 200 acres in the last-named reserve have been planted at a small cost.

34. *Sowings.*—Experience in this circle has shown that broadcast sowings unaccompanied by preparation of the soil are a failure and waste of money and will be discontinued.

With favorable rains better results might be attained, but the success of such work even then must depend upon the interest and energy shown by subordinates in charge, and these qualities, I fear, are generally wanting. District Forest-officers have no time to personally supervise such work. A little timely weeding or clearing costing little or nothing would be of the greatest value.

Nellore.—The experiment in the Sríharikóta forests of broadcast sowing in prepared patches was again a failure. The past unfavorable seasons have no doubt contributed to this result. Similar work undertaken in the casuarina plantations have been more successful, and last as well as former years' sowings are encouraging. It is proposed by this method to convert the older casuarina plantations into a mixed forest of *Albizzia amara*, *Azadirachta indica*, *Albizzia lebbek* *Cassia florida*, &c. *Cassia auriculata*, as a minor product, has also been sown and has succeeded well. The outlay during the year was only Rs. 38 and about 150 acres were treated.

Cuddapah.—One thousand palmyra seeds were sown in Rámésvaram plantation, but none have yet germinated. Two acres in Ooperapalle plantation sown with various seeds were fairly covered with seedlings, but all have succumbed to the drought. A similar sowing over 25$\frac{3}{4}$ acres in the Reddipalle plantation has resulted in about 25 per cent. of the seeds surviving the hot weather.

North Arcot.—The palmyra seeds sown last year in Tiruvallam plantation and Satghur reserve have germinated fairly well, and 38,000 have been sown this year in the former and 24,000 in the latter reserve.

Avaram (*Cassia auriculata*) sowings undertaken last year in Nelvoy tope, Nagapatla and Chamala reserves in abandoned fields are a failure, but better success has followed sowings in Musalimadugu, Kappulur, Kelur, Vellakal and Ambúr reserves.

A strip sowing in one of the improvement fellings of the Ambúr reserve where the soil had been slightly worked up of *Acacia sundra*, *Albizzia amara* and *Albizzia lebbek* has been very successful and this operation will be continued. An area of about 150 acres in the Napier reserve has been sown with *Acacia sundra* and at the time of submitting the District report germination had commenced. In the Carnatic Ghur reserve over about 120 acres, creepers have been cut and one-foot square patches have been prepared for the reception of sandalwood (under shade) and *Albizzia lebbek* (in the open).

Sownigs of various seeds in the Anamalai reserve and Agaram Plantation, South Arcot resulted in failure. In the Cuddalore range permission has been given to ryots to cultivate blanks upon the condition that at the end of five years they are made over fully stocked with cashew. The results so far are satisfactory.

(G) *Improvement fellings.*

35. *Nellore.*—An experimental area of 2 acres in Sríharikóta has been coppiced instead of pollarded. The stool shoots are coming on well and it will be found more remunerative eventually to treat the whole of this forest similarly, leaving a small percentage of the more valuable trees as standards.

Gudur reserve.—An area has been fenced in and the stunted growth is being cut back, the most promising and valuable species being left as standards. Similar work has been carried out over small areas in the Sathiavedu and Aradur reserves, Chingleput district; the coppice is coming on well.

North Arcot.—These operations have been conducted upon an extensive scale and have extended over an area of 5,584 acres in 24 reserves. They have varied from moderate improvement fellings to cutting back the whole growth, in some instances a few of the more promising and valuable trees being left as standards. The work has been done partially departmentally and the rest by contractors under supervision. The results are good both from a sylvicultural and financial points of view, the net profit having been Rs. 19,200. Under direct supervision the proceeds do not equal those from contractors working; this is only natural, while on the other hand the work is better done. Considering the establishment at his command Mr. Marshall deserves great credit.

Tanjore.—Eighteen acres of the Vettangudi reserve were cut over; cost and results not reported.

Salem.—Ten areas in different reserves extending over 3,686 were felled over by contractors for fuel supply; in most cases clean felling had to be resorted to; other areas to meet local requirements have been undertaken departmentally; the coppice shoots are all that can be desired.

Weeding, creeper-cutting, &c.

Cuddapah.—Creeper-cutting was done throughout Kodur and Ooperapalle plantations by the temporary establishment.

Creeper-cutting was carried out in compartments 4, 16, 15, 22, 24 and 26 of Balapalle working circle and over 4 acres of coupe No. 1 of Horsleykonda at an average cost of Re. 1 per acre. The fences of three topes were thoroughly repaired and 4 topes were newly fenced with stone wall or ditch and also hedge.

North Arcot.—Five hundred acres in the Napier reserve cut over in the beginning of 1892 were cleared of creepers and thorns as were all the casuarina plantations; in these prickly-pear had begun to assert itself.

Trichinopoly.—Removal of prickly-pear and weeding of the casuarina plantations has been attended to.

(H) *Experiments and Exotics.*

Date.

In Nellore.—At the commencement of the year there were 480 plants, 270 were planted during the year. Of these 357 have been killed by white-ants.

In Cuddapah.—The dates from Saharanpur planted in the Balapalle nursery have decreased in numbers from 50 to 21 and are not flourishing. The site and soil are uncongenial. Of the 105 Persian Gulf dates planted in Peryavaram palmyra plantation, 10 have died in spite of regular watering.

In Chingleput.—The Busrah and South Malabar plants have made fair progress. The Egyptian dates sown last year in Maiyur plantation are thriving.

In North Arcot.—Fifty-nine Busrah seeds raised from seeds in 1886 are now 4′ to 5′ high. Eighty-five of the 86 date offsets imported from Busrah in 1886 are thriving and vary in height from 4′ to 16′. On the 31st March 852 date seeds obtained locally last year germinated and the seedlings are from 1′ to 2′ high. The seedlings from 17,148 seeds sown in 1892–93 are thriving. The large date nursery made last year in Tiruvallam plantation is a great success, and the seedlings are healthy and well grown, they will be planted out this year; a quantity of seed was also obtained locally. The seedlings planted in 1891–92 have done decidedly well, they were planted alternately with casuarina.

In South Arcot.—In 7 ranges there existed 156 trees on the 31st March 1892 One hundred and forty now remain varying in height from ½′ to 9′. During the year 8 were added.

In Tanjore.—Of the 446 date plants planted in 1881 in the north and south date gardens in the Vettangudi forest, 221 in the former and 225 in the latter survive varying from 2¾′ to 14′ in height. Of the date offsets planted in October 1889, 5 have died during the year and the remaining 109 are thriving. Only 69 out of 223 Persian date seeds received from the Conservator of Forests sown in pots in the Vettangudi nursery during 1891–92 are alive and flourishing. Thirty-seven plants put out last year in the Ovelakudi reserve have all died. In the Malthottam west block in the southern range there remained, at the beginning of the period under report, 40 date plants with 62 offsets making in all 102. Of these 37 died during the year, the remaining 65 trees vary in height from 3 to 10 feet.

In Trichinopoly.—The Phoenix Dactilifera plants surviving at the close of the last year both on the Pachamalai and in the Cauvery plantation are doing well.

In Salem.—The 18 date palm seedlings planted in the Kuravalli Kumbai reserved forest in Námakal range have died. Twenty-four of the 34 seedlings on the banks of the Chennar river mentioned in last report have died and the remaining 10 are reported sickly.

Mahogany.

In Nellore.—Of the 172 plants remaining at the commencement of the year, 23 died in spite of continued watering. Eighty-two plants of *Swietenia Maerophylla* were planted during the year; these are growing well.

In Chingleput.—Of the 57 seedlings which survived last year, 40 survive and are flourishing. The mahogany seedlings are doing well in the Maiyur plantation, 150 were newly put out, of which 71 have died. The older ones are healthy but have not put in much wood.

In North Arcot.—At the commencement of the year there remained 394 trees varying in height from 4′ to 15′. Of these 125 died during the year. The remainder varies in height from 2½′ to 15′. In 1892–93, 200 plants were planted in Palamadi nursery. In Palmanér Eucalyptus plantation there existed on the 31st March 1892, 551 varying in height 3′ to 7′. Of these 200 have died, the balance is now from 4′ to 9′ high and 200 were planted out in 1892. The mahogany planted in Tiruvallam is doing fairly well. But is not a great success considering the care taken. In Palamadi reserve, 200 plants are in the nurseries and will be put out before the end of October.

In South Arcot.—It is reported that there existed in 5 ranges 172 on the 31st March 1892. The 8 plants added during the year are sickly, the remainder varies in height from 3′ to 30′.

In Tanjore.—There are 35 trees in the Vettangudi forest in the northern range varying in height and girth from 4′ to 23′ and from 8″ to 2′ 5″, respectively.

In Trichinopoly.—The Swietenia mahogany plants surviving at the close of last year both on the Pachamalai and in Cauvery plantation are doing well.

Peltophorum Ferrugineum.

In Nellore.—There remained 5 plants of Peltophorum at the commencement of the year and these are growing well.

In South Arcot.—In Siruvadi and Murungapakam there existed 613 trees—to these 164 were added during 1892–93—these are flourishing.

In Tanjore.—The 24 plants planted in Vettangudi forest in the northern range in 1886 are thriving well, their height and girth vary from 15½′ to 31′ and 1¼′ to 3¾′, respectively.

Red Sanders.

In Nellore.—There were at the commencement of the year 15 plants, 7 were killed by the drought during the year.

In South Arcot.—At relief camp there existed 21 on the 31st March 1893, 7 were added during the year making in all 28, and these are growing well.

Sissu.

In Nellore.—Of the 8 plants that remained at the commencement of the year, 2 have died. Death is ascribed to the heat.

In South Arcot.—At the close of March 1892 there existed in Tiruvadi, Murungapakam and relief camp tope 614 and one in nursery tope, 67 died during the year, the remaining 547 thrive varying in height from 16′ to 20½′. Those planted in the relief camp are stunted. The one existing in the nursery tope is 25′ high.

Burmah Bamboos.

In Chingleput.—Those in the Tandrai reserved forest and Maiyur plantation are doing well.

In Nellore.—Of the 1,760 bamboo plants remained at the commencement of the year, 560 were killed by insects.

Ceara Rubber.

In South Arcot, No. II Range (Tirúdivanam and relief camp).—There existed on the 31st March 1892, 42 and 154 were planted during the year—these flourished and have attained a height of 22′.

Eucalyptus.

In the Salem district the 2 Eucalyptus trees planted in Hosur range continue to flourish.

Erythroxylon Coca.

In Cuddapah the seedlings at Balapalle and Horesleykonda are still alive, but have made poor progress.

Acrocarpus laxinifolius.

In Cuddapah the favorable opinion expressed in the last report requires modification, 65 per cent. of those planted at Horesleykonda have died as well as some 30 planted out in pits in the Kodur plantation.

Edible Prickly-pear.

In Nellore the 12 plants that remained at the commencement of the year are growing well.

SOUTHERN CIRCLE—(ABSTRACT OF COLLECTORS' REPORTS).

(E) *Natural Reproduction.*

Natural reproduction under protection is unmistakeably good, but areas that are still open to wood-cutting on seigniorage permits show little progress compared with the better closed areas. The poorer areas, especially, consisting of hill sides and steep slopes in the near neighbourhood of large herds of cattle, are over-grazed and suffer both in loss of soil and failures of seedlings. Little can be done beyond making careful observations until the establishment is strengthened.

The following is a summary of the observations made by the district officers :—

Madura.—The coppice growth in Kadavur and Vemburuli blocks of Alagar hill and in the recently cut-over coupes is satisfactory. The Conservator remarks that throughout the reserves in Madura, especially on the low hills in the plains, improvement is noticeable; but protection against cattle and wood-cutters is not as efficacious as it will, it is hoped, become hereafter.

Tinnevelly.—The natural reproduction in the firewood coupes of the ghât forests worked under the "coppice with standard system" is all that could be wished for. In the evergreen forests of the higher hills there is good natural reproduction from kongu (*Hopea wightiana*), the chief timber tree of this district; and improvement fellings are being made by cutting out the inferior growth around it. In the forests of the plains, which chiefly consist of rocky hills, the growth of grass and scrub jungle has wonderfully improved during the last seven years of rigid protection.

North Coimbatore.—No progress.

South Coimbatore.—In the Sholakarai range, the coppice reproduction continues to be satisfactory, and in the coupes felled the seedling reproduction of teak (*Tectona grandis*), rosewood (*Dalbergia latifolia*) and vengai (*Pterocarpus marsupium*) also continues to be fair. In the Anamalai forest the natural reproduction of teak (*Tectona grandis*) cannot be said to be good. In Chinnar forest in the Bolampatti valley, the coppice shoots in the coupes felled over have come up fairly well. The Conservator remarks that a good deal of the young growth of *Dalbergia latifolia* is due to root-suckers, although there are seedlings as well.

Nilgiris.—The coppice growth from Australian *Eucalyptus* and wattles has as usual been excellent. The reproduction from sandalwood (*Santalinus album*) in the Sigur range is satisfactory, as also from vengai (*Pterocarpus marsupium*), teak (*Tectona grandis*) and rosewood (*Dalbergia latifolia*) in the thinned compartments of the Marigudi block of Mudumalai. Young teak coppice is abundant in Tippacadoo and parts of Mudumalai. The annual growth from stool shoots is very good. The reproduction of *anogeissus* and mutty (*Terminalia coriacea*) leaves nothing to be desired. The Conservator observes that natural reproduction is decidedly improving under protection, and that the sholas tend to expand where fires have been kept out. But the reverse is the case in the deciduous forests, where the damage done by fires every year is becoming somewhat alarming.

North Malabar.—Progress is satisfactory as regards such trees as mathi (*Terminalia tomentosa*), red cedar, vagai (*Albizzia lebbek* and *odoratissima*), &c., but not in the case of teak.

South Malabar.—In the Nellikutta and Karimpoya reserves the seedling growths of *Lagerstrœmia microcarpa* and *Dalbergia latifolia*, and coppice growth of *Terminalias* and *Tectona grandis* are very good. The natural production in the Chenat Nair reserve is all from seeds as the forest is worked under the selection system. The seedling growth of *Xylia dolabriformis*, *Lagerstrœmia microcarpa*, *Pterocarpus marsupium* and *Dalbergia latifolia* is good. In the Walayar reserve worked under the "coppice with standard system," the growth from stumps and seeds have been found to be excellent.

South Canara.—Natural regeneration is disappointing owing to (1) grazing, (2) fire, (3) high winds, (4) hilly ground, and (5) violent floods of rain.

(F) *Artificial production.*

Plantations.

Madura.—Along the Alagar hill ghât road, *ficus* cuttings have been planted as an avenue. The Gundan shola plantations, the small Tumbarai plantations and the other minor sholas included in the plantations are all looking very well.

Tinnevelly.—In Kudiraimoliteru reserve forest (a large sandy waste 13,392 acres in extent) 1,153 seedlings of various species were reared in addition to the ordinary cultural operations. In some of the plain forests *Cassia auriculata* seeds were dibbled into the soil, but they failed on account of drought. Palmyra nuts (*Borassus flabilliformis*) and casuarina and teak seeds were also sown in some reserves during the year.

North Coimbatore.—There is no plantation in this district except the Bylur sandalwood plantation which has since been treated as a sandalwood compartment.

South Coimbatore.—Most of the plants of vengai (*Pterocarpus marsupium*) and rosewood (*Dalbergia latifolia*) transplanted in 1891 in the felled coupes of the Chinnar working circle have died, also a few of the mahogany (*Swietenia macrophylla*). The broadcast sowing of teak, vengai (*Pterocarpus marsupium*) and rosewood (*Dalbergia latifolia*) over another portion of the same circle also failed. The transplantation of mahogany plants into an open corner of the Karian shola plantation likewise proved unsuccessful.

Nilgiris.—The clearing of jungle and creepers in the Mudumalai and Benne teak plantations was completed during the year at a cost of Rs. 215 including cost of upkeep, but pruning is still in progress. The *Eucalyptus* plantations on the plateau have continued to make good growth. No fresh area has been added as Government ordered that they should not be extended.

North Malabar.—The Kanot teak plantations, 41·50 acres in extent, was fire traced as usual. Some little thinning was also done. Over the greater portion of the area the growth of the tree is very slow owing to unsuitable soil. A nursery of teak (*Tectona grandis*), vengai (*Pterocarpus marsupium*) and blackwood (*Dalbergia latifolia*) was formed at Begur and the plants put out in the jungle in pits; 50 per cent. survived and half of this looks very promising.

South Malabar.—152,326 teak and 1,626 *Swietenia macrophylla* seedlings were planted during the year. The weather being unfavorable, there were about 30 per cent. of casualties under teak which were replaced at once. A site of about 100 acres in extent was felled and partly planted with teak and *Swietenia macrophylla.* All the *macrophylla* plants, coppiced lately in Nilambur plantations and Palghat forests, were exempt from the usual borer and showed satisfactory growth.

South Canara.—Besides the maintenance of the two casuarina plantations at Mangalore and the teak plantation at Parappa, broadcast sowings have been made in several reserves and a large quantity of seed has been collected and used for the purpose. Arrangements were also made to dibble 100 acres with cinnamon seeds, but this did not prove completely successful. Seeds of firewood and timber trees were also sown in some reserves. In Coondapoor, 1·7 acres were planted with casuarina.

Topes.

Madura.—The produce of the fruit trees is removed by the minor produce contractors. The topes are periodically inspected; but it is not desirable to have them under the control of the Forest department.

North Coimbatore.—There are not really so many topes or of such extent as entered in the list. Steps have since been taken to correct and revise it.

Cultural operations.

Madura.—The state of the season rendered this impossible.

The Nilgiris.—Seeds of various trees were dibbled and also sown broadcast in the Kuppadi forest, Chedleth range, and in the Kanoth forest. The result was favorable at Kanoth, but at Kuppadi the majority of the seedlings perished.

South Malabar.—Seeds of *Swietenia Macrophylla* and *Sterculia alota* were sown during the year and plants raised from the same.

(G) *Works of Improvement.*

Madura.—The Alagar Hill ghât road from the 3rd to the 5th mile was widened and opposite to Thirtamandapam about 2½ acres of land have been cleared of all thorny shrubs for planting up with useful and ornamental trees.

Tinnevelly.—An improvement felling of pure teak was made in Valaikulam reserve. The area chosen was 5¾ acres. The yield was about 3½ tons per acre and there was a net profit of Rs. 7 per acre. Similar improvement fellings are being regularly carried out in other coupes. Data for calculating the annual increment of growing stock and yield are being recorded in registers kept up in each range.

South Coimbatore.—The Mount Stuart compound was fenced with wire during the year at a cost of Rs. 212-11-0.

The Nilgiris.—Improvement thinnings were carried out in several of the reserves and the results are on the whole satisfactory.

North Malabar.—Some pepper vines were planted in Kanot pepper plantations during the period under report at a cost of Rs. 14.

South Malabar.—All the plantations were weeded during the year; some pruning, parasite-clearing and thinning was also done. The *Swietenia Macrophylla* plants were fenced.

South Canara.—Sixty acres of Ajarkadu and 20 acres in compartment No. 1 of Sabladi were cleaned; creepers were cleared over 20 acres in compartments Nos. 9 and 10, Poitaje. The boundaries of a few reserves were cleared departmentally, but the proceeds could not be disposed of.

(H) *Exotics and Experiments.*

Mahogany.—The good growth of the *Swietenia Macrophylla* in Madura has induced the District Forest-officer to extend its trial; of the trees planted in Tinnevelly in 1887, none has yet reached a greater height than 18 feet. In South Coimbatore, the seedlings raised were put out in the felled area in the Chinnar working circle, but proved a failure as only 68 out of 308 survived and even these are not in a hopeful condition. The *Swietenia mahogani* is flourishing in the Nilgiri district, the largest trees being 10 inches in girth at 3 feet from the ground, but it is not successful in North and South Malabar. The *Swietenia macrophylla* is also successful in the Nilgiris, and every effort has been made to propagate it. In South Malabar, this tree measured 82 feet in height and 82 inches in girth at base in the Chathamborai forest. Trees of the same species planted as standard with teak in Pokote blocks V and VI are also thriving.

Blue gums.—Some of the blue-gums (*Eucalyptus globulus*) planted in 1884 in Tinnevelly have reached a height of 60 feet at an elevation of 2,500 feet. Seeds of *Eucalyptus robusta* have been applied for from Australia to be tried on the Nilgiris as this species makes splendid growth on the slopes; a tree five years old growing at an elevation of 5,000 feet was 40 feet high, a foot in diameter and most beautiful and symmetrical all round. The soil in Sim's park, Coonoor, being miserably poor, the several species of this tree planted there have not had a fair trial. In North Malabar three species of this tree have been grown and all are in good condition.

Rubber trees.—The *Cœra* rubber trees in the Manantoddy garden in North Malabar grow well and produce self-sown seedlings. The *Hevea castilloa* and *Cœra* are thriving in South Malabar. One *Castilloa* was entirely barked by a borer.

Date (*Phœnix dactylifera*).—Fourteen plants are thriving in Mundanthorai and Kadavur in Tinnevelly and have reached a height of 2 feet. The five Egyptian date palm seeds sown in 1891–92 in the Bylur sandalwood compartment in North Coimbatore are doing fairly well and are 4 feet high. In South Malabar there have been several casualties among the plants planted in 1890 and 1891. In South Canara they have proved quite a failure, as the climate is too wet.

Bamboos.—Two consignments of Japanese bamboos were tried in the Nilgiris; the first proved a failure, the plants having died owing to long detention at Madras. In the second 52 out of the 64 plants were received in good condition and planted out at an elevation of 4,700 feet, well protected by a stone wall and hedge. Twenty-eight species are now alive in the Nilgiri district. In North Malabar, the giant bamboos (*Dendrocalamus brandisii*) have been growing vigorously, the largest culm being 95 feet in height and the thickest stems measure 1 foot 3 inches in girth. The growth of the golden Burma bamboos (*Bamboosa vulgaris*) in the same district and in South Malabar is satisfactory, the tallest shoots averaging 34 feet with a girth of 11 inches. The *Bamboosa longispatha* planted in Tannirbhavi in South Canara have failed as they are in pure sand. The *Bamboosa longispathas* and *Cephalastachyum pergracile* are growing well in North and South Malabar. The *Beesha Travancorea* grows satisfactory at Manantoddy and at Kanoth in North Malabar. It is also growing splendidly in the Nilgiris.

Ipecacuanha.—Of the 314 plants of 1887, 87 died during the year. There are also 13 plants of 1884 varying in height from 2 to 3 feet.

Manilla hemp (*Musa textilis*) grows luxuriantly in North Malabar and Nilgiris. In the latter district, the elephants kept by the department destroyed the main stem; but several suckers have come up.

APPENDIX G.

ROADS.

The following is a list of the principal new roads completed during the period under report:—

Ganjám.—Two miles and a half of the Kallada-Tilasingi road and 15 miles of block lines.

Góddvari.—The Ziriguppa-Ramadevipeta and Murmur-Tatlanka roads.

Kistna.—The Navalapuri road; the first section of the Kondapalli hill road; the Bolapalli-Ravulapuram road and the Ravulapuram-Remidicherla road.

Kurnool.—The Rollapenta-Pecheruvu road (4 miles); Adutta-Komativanibhavi road (7½ miles) and the Basavapur-Bundlapenta road.

Cuddapah.—The Peddagadi road and bridge over the stream of the same name.

North Arcot.—The Musalimadugu road.

Salem.—The Ancheti-Kundukota road (2½ miles).

Madura—

(1) Bombadi Shola road.
(2) Sambalpoduvanta road.
(3) Sogu Sukaramkuttu bridle path.

Tinnevelly—

(1) Khansahibpuram road.
(2) Rajapalayam road.
(3) Road to Courtallam rest-house.
(4) Kallimalai road.
(5) Kottanteri road.
(6) Papanasam road.

South Coimbatore.—A timber slip in No. 1 Range, and a road from Iyentalaikayaru to Navaladi.

North Malabar.—The Chedleth hill road (two sections) and a new cart-road from Chedleth Odaipallam through the Kuppadi block.

South Malabar.—Six miles of compartment roads.

Buildings.

The following is a list of the principal new buildings completed during the period under report :—

Ganjám.—A rest-house at Baibali and a Range house at Suradá.

Vizagapatam.—A bungalow at Zambada.

Kistna.—A rest-house at Bollapalli. The former Police station at Gavaravaram was handed over to the department to be used as an inspection shed.

Anantapur.—Outhouses and stables to the Konapanayani bungalow.

Bellary.—A Range house.

Kurnool.—A tana house at Ernapad. A rest-house at Papinenipalli. Several Guards' huts and a Tana hut. The Gudalur rest-house was purchased from the Southern Mahratta Railway.

Cuddapah.—The Balapalli inspection bungalow.

North Arcot.—Four rest-houses and stables to two rest-houses. Wells were dug in the compounds of rest-houses.

South Arcot.—The Tirukkóyilúr Range office (Rs. 1,090).

Madura—

Gudalur forest station (Rs. 698).
Tandigudi forest station (Rs. 739).
Tuni rest-house (Rs. 817).
Munur rest-house (Rs. 1,063).
Vannathiparai rest-house (Rs. 706).
Outhouses to Cumbum Ranger's house (Rs. 215).

Tinnevelly.—Eighteen buildings including outhouses and Forest Guards' huts.

North Coimbatore.—Two Range houses (Rs. 700 each) and a rest-house at Hanur.

South Coimbatore—Several buildings to serve as quarters to Rangers, Foresters and guards (Rs. 4,543).

Nilgiris.—A Forester's house, a depôt clerk's office at Ootacamund, a Ranger's shed at Muthanad and several Guards' huts.

North Malabar.—A double serambi at Muthungai and one at Chedleth.

South Canara.—A forest hut in Coondapoor.

A rest-house at Kavuthumalai in South Arcot is reported to have been destroyed by fire.

APPENDIX H.

Nellore.

1.—STATEMENT showing the results of transport of casuarina wood by tramway compared with transport by country carts in the casuarina plantations in Nellore.

Capital Account, 1885–86.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To cost of plant		6,950	0	0	By depreciation at 6 per cent.		417	0	0
					,, interest at 4 per cent.		278	0	0
					,, balance of stock		6,255	0	0
	Total	6,950	0	0		Total	6,950	0	0

Revenue Account, 1885–86.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To working expenses		361	5	3	By balance written off		1,056	5	3
,, interest at 4 per cent.		278	0	0					
,, depreciation		417	0	0					
	Total	1,056	5	3		Total	1,056	5	3

Work done—1,891 tons of casuarina wood carried over $1\frac{1}{4}$ miles = 2,127 ton-miles.
Actual charges for carrying—2,127 ton miles at annas 7-11 = Rs. 1,056-5-3.
Estimated cost by country carts—2,127 ton miles at Re. 1 = Rs. 2,127.

Capital Account, 1886–87.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To balance from 1885–86		6,255	0	0	By depreciation at 6 per cent.		892	11	10
Add new stock		8,624	0	0	,, interest at 4 per cent.		595	2	7
					,, balance of stock		13,391	1	7
	Total	14,879	0	0		Total	14,879	0	0

Revenue Account, 1886–87.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To working expenses		830	14	9	By balance written off		2,318	13	2
,, interest at 4 per cent.		595	2	7					
,, depreciation		892	11	10					
	Total	2,318	13	2		Total	2,318	13	2

Work done—2,036 tons of casuarina wood carried over $2\frac{3}{4}$ miles = 5,599 ton miles.
Actual charges for carrying—5,599 ton miles at annas 6-8 = Rs. 2,318-13-2.
Estimated cost by country carts—5,599 ton miles at annas 14-2 = Rs. 4,957-7-2.

Capital Account, 1887–88.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To balance from 1886–87		13,391	1	7	By interest at 4 per cent.		535	10	3
					,, balance of stock		12,855	7	4
	Total	13,391	1	7		Total	13,391	1	7

Revenue Account, 1887–88.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To working expenses					By balance written off		535	10	3
,, interest at 4 per cent.		535	10	3					
	Total	535	10	3		Total	535	10	3

No wood was cut and transported on tramway as there is no demand for it and as there was a large stock of previous year undisposed.

Capital Account, 1888–89.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To balance from 1887–88		12,855	7	4	By depreciation at 6 per cent.		771	5	3
					,, interest at 4 per cent.		514	3	6
					,, balance		11,569	14	7
	Total	12,855	7	4		Total	12,855	7	4

Revenue Account, 1888–89.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To working expenses		545	11	11	By balance written off		1,831	4	8
,, interest at 4 per cent.		514	3	6					
,, depreciation		771	5	3					
	Total	1,831	4	8		Total	1,831	4	8

Work done—2,065 tons of casuarina wood carried over $2\frac{3}{4}$ miles = 5,679 ton miles.
Actual charge for carrying—5,679 ton miles at annas 5-2 = Rs. 1,831-4-8.
Estimated cost by country carts—5,679 ton miles at annas 14-0 = Rs. 4,969-2-0.

Capital Account, 1889–90.

	Dr.	Rs.	A.	P.		Cr.	Rs.	A.	P.
To balance from 1888–89		11,569	14	7	By depreciation at 6 per cent.		694	3	1
					,, interest at 4 per cent.		462	12	9
					,, balance		10,412	14	9
	Total	11,569	14	7		Total	11,569	14	7

I.—Statement showing the results of transport of casurina wood by tramway, &c.—*cont.*

Revenue Account, 1889–90.

Dr.	Rs. A. P.	Cr.	Rs. A. P.
To working expenses	117 10 11	By balance written off	1,274 10 9
,, interest at 4 per cent.	462 12 9		
,, depreciation	694 3 1		
Total ..	1,274 10 9	Total ..	1,274 10 9

Work done—504 tons of casuarina wood carried over 2¾ miles = 1,386 ton miles.
Actual charge for carrying—1,386 ton miles at annas 14–8 = Rs. 1,274–10–9.
Estimated cost by country carts—1,386 ton miles at annas 14–11 = Rs. 1,292–2–6.

Capital Account, 1890–91.

Dr.	Rs. A. P.	Cr.	Rs. A. P.
To balance from 1889–90	10,412 14 9	By depreciation at 6 per cent. ..	624 12 5
		,, interest at 4 per cent.	416 8 3
		,, balance	9,371 10 1
Total ..	10,412 14 9	Total ..	10,412 14 9

Revenue Account, 1890–91.

Dr.	Rs. A. P.	Cr	Rs. A. P.
To working expenses	338 1 5	By balance written off	1,379 6 1
,, interest at 4 per cent.	416 8 3		
,, depreciation	624 12 5		
Total ..	1,379 6 1	Total ..	1,379 6 1

Work done—2,411 tons of casuarina wood carried over 2¾ miles = 6,630 ton miles.
Actual charge for carrying—6,630 ton miles at annas 3–3 = Rs. 1,379–6–1.
Estimated cost by country carts—6,630 ton miles at annas 12–3 = Rs. 5,076–1–6.

Capital Account, 1891–92.

Dr.	Rs. A. P.	Cr.	Rs. A. P.
To balance from 1890–91	9,371 10 1	By depreciation at 6 per cent.	562 4 8
		,, interest at 4 per cent.	374 13 10
		,, balance	8,434 7 7
Total ..	9,371 10 1	Total ..	9,371 10 1

Revenue Account, 1891–92.

Dr.	Rs. A. P.	Cr.	Rs. A. P.
To working expenses	239 1 3	By balance written off	1,176 3 9
,, interest at 4 per cent.	374 13 10		
,, depreciation	562 4 8		
Total ..	1,176 3 9	Total ..	1,176 3 9

Work done—1,613 tons of casuarina wood carried over 2¾ miles = 4,436 ton miles.
Actual charge for carrying—4,436 ton miles at annas 4–2 = Rs. 1,176–3–9.
Estimated cost by country carts—4,436 ton miles at annas 13–5 = Rs. 3,719–12–4.

Capital Account, 1892–93 up to 30th June 1893.

Dr.	Rs. A. P.	Cr.	Rs. A. P.
To balance from 1891–92	8,434 7 7	By depreciation at 6 per cent.	506 1 1
		,, interest at 4 per cent.	337 6 0
		,, balance	7,591 0 6
Total ..	8,434 7 7	Total ..	8,434 7 7

Revenue Account, 1892–93.

Dr.	Rs. A. P.	Cr.	Rs. A. P.
To working expenses	472 6 2	By balance written off	1,315 13 3
,, interest at 4 per cent.	337 6 0		
,, Depreciation	506 1 1		
Total ..	1,315 13 3	Total ..	1,315 13 3

Work done—1,830 tons carried over 2¾ miles = 5,033 ton miles.
Actual charge for carrying—5,033 ton miles at annas 4–2 = Rs. 1,315–13–0.
Estimated cost by country carts—5,033 ton miles at annas 13–11 = Rs. 4,384–10–0.

II.—Statement showing the results of transport of wood by tramway compared with transport by country carts in Śrîharikóta Range.

Capital Account, 1889–90.

Dr.	Rs. A. P.	Cr.	Rs. A. P.
To cost of plant delivered at Penubakam ..	17,070 0 0	By depreciation	1,024 3 2
		,, interest	682 12 10
		,, balance	15,363 0 0
Total ..	17,070 0 0	Total ..	17,070 0 0

II.—Statement showing the results of transport of wood by tramway, &c.—*cont.*

Revenue Account, 1889–90.

Dr.	Rs.	A.	P.	Cr.	Rs.	A.	P.
To working expenses	25	13	11	By balance written off	1,893	7	0
,, road-making charges, &c.	160	9	1				
,, interest at 4 per cent.	682	12	10				
,, depreciation at 6 per cent.	1,024	3	2				
Total	1,893	7	0	Total	1,893	7	0

Work done—137 tons of fuel moved over 2½ miles = 342½ ton miles.
Actual cost of work—342½ ton miles at Rs. 4–15–1 Rs. = 869–3–9.
Estimated cost of carting—342½ ton miles at annas 1–10 = Rs. 39–3–11.

Capital Account, 1890–91.

Dr.	Rs.	A.	P.	Cr.	Rs.	A.	P.
To balance from 1889–90	15,363	0	0	By depreciation at 6 per cent.	921	12	6
				,, interest at 4 per cent.	614	8	4
				,, balance	13,826	11	2
Total	15,363	0	0	Total	15,363	0	0

Revenue Account, 1890–91.

Dr.	Rs.	A.	P.	Cr.	Rs.	A.	P.
To working expenses	625	1	0	By balance written off	2,262	1	7
,, road-making, repairs, &c.	100	11	9				
,, interest at 4 per cent.	614	8	4				
,, depreciation	921	12	6				
Total	2,262	1	7	Total	2,262	1	7

Work done—1,820 tons of fuel moved 4½ miles = 8,190 ton miles.
Actual cost of work—8,190 ton miles at annas 4–5 = Rs. 2,262–1–7.
Estimated cost of carting—8,190 ton miles at annas 3–5 = Rs. 1,731.

Capital Account, 1891–92.

Dr.	Rs.	A.	P.	Cr.	Rs.	A.	P.
To balance from 1890–91	13,826	11	2	By depreciation at 6 per cent. on capital cost of tramway	829	9	7
				By interest at 4 per cent.	553	1	1
				,, balance	12,444	0	6
Total	13,826	11	2	Total	13,826	11	2

Revenue Account, 1891–92.

Dr.	Rs.	A.	P.	Cr.	Rs.	A.	P.
To working expenses	444	6	5	By balance written off	1,827	1	1
,, interest at 4 per cent.	553	1	1				
,, depreciation	829	9	7				
Total	1,827	1	1	Tota	1,827	1	1

Work done—943 tons of fuel moved over 4½ miles = 4,243½ ton miles.
Actual cost of work—4,243½ ton miles at annas 3–5 = Rs. 1,827–1–1.
Estimated cost of carting—4,243½ ton miles at annas 3–8 = Rs. 1,414–6–4.

Capital Account, 1892–93 up to 30th June 1893.

Dr.	Rs.	A.	P.	Cr.	Rs.	A.	P.
To balance from 1891–92	12,444	0	6	By depreciation	876	1	11
Add cost of new materials	2,158	0	0	,, interest	584	1	3
				,, balance	13,141	13	4
Total	14,602	0	6	Total	14,602	0	6

Revenue Account, 1892–93 up to 30th June 1893.

Dr.	Rs.	A.	P.	Cr.	Rs.	A.	P.
To working expenses	1,058	1	9	By balance written off	2,518	4	11
,, interest at 4 per cent.	584	1	3				
,, depreciation	876	1	11				
Total	2,518	4	11	Total	2,518	4	11

Work done—2,764 tons of fuel moved 4½ miles = 12,438 ton miles.
Actual cost of work—12,438 ton miles at annas 3–3 = Rs. 2,518–4–11.
Estimated cost of carting—12,438 ton miles at annas 3–9 = Rs. 2,915–2–6.

North Arcot.

III.—Statement showing the results of the transport of casuarina fuel by tramway compared with the transport by carts in North Arcot.

Capital Account, 1892–93.

Dr.	Rs.	A.	P.	Cr.	Rs.	A.	P.
To balance from 1891–92	10,482	1	2	By interest at 4 per cent.	419	4	6
				,, depreciation at 6 per cent.	628	4	6
				,, balance	9,434	8	2
Total	10,482	1	2	Total	10,482	1	2

III.—Statement showing the results of transport of casuarina fuel by tramway, &c.—*cont.*

Revenue Account—1892–93.

Dr.	Rs.	A.	P.	*Cr.*	Rs.	A.	P.
To working expenses	149	11	6	By balance written off	1,201	12	6
,, road making and repair	4	8	0				
,, interest	419	4	6				
,, depreciation	628	4	6				
Total	1,201	12	6	Total	1,201	12	6

Work done—844 tons of fuel moved 2½ miles = 2,110 ton miles.
Actual cost of work—2,110 ton miles at annas 9-11 = Rs. 1,201-12-6.
Estimated cost of carting—2,110 ton miles at annas 4·80 = Rs. 633.

IV.—Tramways.

South Coimbatore.

The plant consists of the following :—

Seven miles of portable railway suitable for animal power, system A, page 12, Fowler's Catalogue of Light Railways, No. 43, Part IV, with steel rails, steel corrugated sleepers and wrought steel chains riveted on full width of sleeper, 14 lbs. per yard, 2 feet gauge ; 5 crossings ; 1 portable turn-table, 3 feet diameter ; 1 weighing machine, 3½ feet square ; 36 waggons, type H. H. of the Catalogue ; 1 tool box ; 4 eccentric tongs ; 8 extras.

2. The following is the capital account and gain or loss account prepared in the form adopted by the Conservator of Forests, Southern Circle, last year :—

Capital Account.

Year.	Opening balance.	Debit 4 per cent. interest on opening balance.	Debit new capital.	Debit repairs and renewals.	Total of columns 2 to 5.	Credit 6 per cent. for depreciation on opening balance.	Closing balance.
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1888–89	..	..	56,885	..	56,885	..	56,885
1889–90	56,885	2,275	3,200	..	62,360	3,413	58,947
1890–91	58,947	2,357	2,131	176	63,611	3,536	60,075
1891–92	60,075	2,403	8,987	810	72,275	3,605	68,670
1892–93	68,670	2,747	..	210	71,627	4,120	67,507
Total ..	..	9,782	71,203	1,196	..	14,674	..

Gain or Loss Account.

Year.	Debit depreciation as per column 7.	Debit working expenses.	Total of columns 9 and 10.	Credit interest as per column 3.	Credit		Credit savings in former cart-road annual repairs.	Total of columns 12, 14 and 15.	Annual gain or loss on outturn compared with carts *plus* or *minus*.
					Cubic feet of timber removed as if by carts.	At 4 pies a cubic foot.			
	9	10	11	12	13	14	15	16	17
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1888–89	..	..	..	..	..	..	..	..	..
1889–90	3,413	1,019	4,432	2,275	18,353	382	1,200	3,857	— 575
1890–91	3,536	3,483	7,019	2,357	56,102	1,168	1,200	4,725	—2,294
1891–92	3,605	1,840	5,445	2,403	30,378	632	1,200	4,235	— 1,210
1892–93	4,120	2,418	6,538	2,747	40,204	837	1,200	4,784	— 1,754
Total ..	14,674	8,760	23,434	9,782	1,45,037	3,019	4,800	17,601	— 5,833

The account shows a loss of Rs. 5,833 for the four years, but as the Conservator observed last year, a much larger sum for depreciation has been debited against the working than has actually been needed for repairs and renewals.

3. Taking this into consideration there is a balance to our credit of Rs. 13,478 in the depreciation account (*i.e.*, difference of columns 5 and 7), it may therefore fairly be considered that the working has actually resulted in a profit of (Rs. 13,847—5,833), *i.e.*, Rs. 7,645.

APPENDIX I.

STATEMENT showing list of completed Forest buildings in the Madras Presidency with their approximate cost, &c., on 30th June 1893.

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					NORTHERN CIRCLE.		
				RS. A. P.			
Ganjám.	West Goomsur.	Rest-house ..	Russellkonda ..	2,000 0 0	Rest-house with out-houses, the former (containing 4 rooms and 3 bath-rooms) of sun-dried bricks and thatch roof, the latter, sun-dried bricks and tiled roof.	Used by District Forest-officer and Range officers when on inspection.	Purchased.
	Do. ..	Do. ..	Mujaguda ..	248 3 8	Burnt bricks and thatch roof, 3 rooms 12 × 12 and 2 bath-rooms, out-houses of mud walls and thatch roof.	Do. do.	Built.
	Do. ..	Do. ..	Gullery ..	972 5 0	Thatch roof and mud walls, one room and one side room with 2 bath-rooms, out-houses, mud walls and thatch roof.	Do. do.	Do.
	Do. ..	Do. ..	Rambha ..	449 2 4	One room 20 × 20, one 20 × 10 and two bath-rooms. Built of sâl planks and thatch roof, out-houses walled with sâl planks and thatch roof.	Do. do.	Do.
	Do. ..	Do. ..	Hattiguda ..	473 6 3	One room 20 × 20, one 20 × 10 and two bath-rooms. Built of sâl planks and thatch roof, out-houses, mud walls and thatch roof.	Do. do.	Do.
	Do. ..	Do. ..	Khariguda ..	257 3 6	Do. do. do. ..	Do. do.	Do.
	Do. ..	Do. ..	Baiballi ..	564 6 0	Do. do. do. ..	....	
	East Goomsur.	Do. ..	Gayagonda ..	751 15 10	Burnt bricks and thatch roof, 3 rooms 12 × 12 and 2 bath-rooms, out-houses of mud walls and thatch roof.	Used by District Forest-officer and Range officers when on inspection.	Built.
	Do. ..	Do. ..	Jagannathprasad	528 10 8	Do. do. do. ..	Do. do.	Do.
	Do. ..	Do. ..	Gundribadi ..	549 4 11	One room 20 × 20, one 20 × 10 and 2 bath-rooms. Built of sâl planks and thatch roof, out-houses walled with sâl planks and thatch.	Do. do.	Do.
	Do. ..	Do. ..	Tilisingi ..	738 13 10	One room 20 × 20, one 20 × 10 and 2 bath-rooms. Built of sâl planks and thatch roof, out-houses, mud walls and thatch.	Do. do.	Do.
	Do. ..	Do. ..	Tarsingi ..	571 6 11	Do. do. do. ..	....	
	Do. ..	Do. ..	Bonta ..	568 8 6	Do. do. do. ..	....	
	Do. ..	Do. ..	Chandragiri ..	895 6 4	On piles. Built of sâl planks and thatch roof, 2 rooms 20 × 20 and 2 bath-rooms, out-houses, mud wall and thatch roof.	....	
	Suradá ..	Do. ..	Osurabando ..	563 13 6	One room 20 × 20, one 20 × 10 and 2 bath-rooms. Built of sâl planks and thatch roof, out-houses, mud walls and thatch roof.	....	
	Buguda ..	Do. ..	Kurcholy ..	565 0 5	Do. do. do. ..	....	
	Berhampore.	Do. ..	Berhampore ..	1,200 0 0	Rest-house sun-burnt bricks and thatch roof, 3 rooms and 2 bath-rooms, out-houses, mud walls and thatch.	Used by District Forest-officer and Range officers when on inspection.	Purchased.
	Do. ..	Office ..	Do. ..		Sun-burnt bricks and thatch roof, one room 20 × 20 and one side room.	Range office	Do.
	Do. ..	Rest-house ..	Padara ..	125 0 0	One room 12 × 12, mud walls and thatch roof	Inspection house for Range officer.	Built.
	Do. ..	Do. ..	Kukkarakhandi.	125 0 0	Do. do. do. ..	....	Do.

Statement showing list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					NORTHERN CIRCLE—*cont.*		
				RS. A. P.			
Vizagapatam.	Golgonda .	Depôt	Kondasantha ..	142 0 0	Two rooms 14′ × 14′ and 12′ × 12′. A covered shed 15½′ × 50′ and an open yard 15′ × 50′. Walls of mud. The sheds yard enclosed by wood and bamboo fence. Rooms and shed thatched. Erected November 1890.	As depôt and also by Range officer.	
	Palkonda ..	Inspection shed.	Donnabai Agency.	209 0 6	40′ × 36′. Erected on sâl posts, wattle and daub walls and thatched roof. Erected October 1891.	By Inspecting officers ..	Rs. 2–10–0 spent on repairs has been added to the original cost (Rs. 206–6–6).
	Do. ..	Permit gumastahs' houses (7).	Throughout the range.	175 0 0	Mud and thatch, two rooms. Erected in December 1871 ..	Permanently occupied by permit gumastahs.	
	Do. ..	Tannas (6) ..	Do. ..	90 0 0	Mud and thatch, one room. Erected in December 1871 ..	Permanently occupied by tannadars.	
	Do. ..	Inspection shed.	Jambada Agency.	239 0 4	40 × 36, unburnt brick in mud, thatched roof. Erected in April 1892.	By Inspecting officers ..	Rs. 50 of this was spent last year.
					Note.—Rs. 54 was spent on two bungalows at Geddakola and Chinagora in the Palkonda range.		
Gódávari	Bhadráchalam Subdivision.	Rest-house ..	Waddigudem ..	770 0 0	Thatched building raised on piles containing out-houses ..	Used by Range officers ..	The cost includes the value of the wood.
	Do. ..	Do. ..	Mormur ..	700 0 0	Do. do. do. ..	Used by Inspecting officers.	
	Do. ..	Do. ..	Chintur ..	700 0 0	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Jiriguppa ..	700 0 0	Do. do. do. ..	Do. do.	
	Do. ..	Do. ..	Singavaram ..	700 0 0	Do. do. do. ..	Do. do.	
	Do. ..	Range house ..	Marrigudem ..	400 0 0	Built of bamboos, walls plastered with mud and covered with thatched.	Used by Range officers.	
	Do. ..	Revenue gumastah's shed.	Waddigudem ..	50 0 0	Do. do. do. ..	Used by Revenue gumastah.	
	Rajahmundry.	Do. ..	Kottapalli ..	20 0 0	Do. do. do. ..	Used by Permit gumastah.	
	Do. ..	Forest guards' shed.	Devancheruvu ..	46 0 0	Do. do. do. ..	Used by Forest guard.	
	Do. ..	Tanna shed ..	Nagulcheruvu ..	10 0 0	Covered with palmyra leaves	Do. Tanna peon.	
	Do. ..	Do. ..	Gokavaram ..	12 0 0	Do. do.	Do. do.	
	Peddápuram.	Revenue gumastah shed.	Yeleswaram ..	20 0 0	Bamboo walls and thatched roof	Used by Permit gumasta.	
	Do. ..	Do. ..	Senkavaram ..	20 0 0	Do. do.	Do. do.	
	Do. ..	Forest guard's shed.	Ragavapuram ..	5 0 0	Thatched hut	Used by Ticket issuing gumastah.	
	Do. ..	Do. ..	Vatangi ..	5 0 0	Do.	Do. do.	
	Do. ..	Do. ..	Ankampalam ..	5 0 0	Do.	Do. do.	
	Do. ..	Tanna shed ..	Bhanavaram ..	10 0 0	Do.	Do. by Tanna peon.	
	Do. ..	Do. ..	Murari	10 0 0	Do.	Do. do.	
	Do. ..	Do. ..	Yeleswaram ..	10 0 0	Do.	Do. do.	
	Yernagúdem delta.	Revenue gumastah's shed.	Mulagalampalli.	28 0 0	Thatched house	Used by Permit gumasta.	
	Do. ..	Tanna shed ..	Mogultur ..	20 0 0	Do.	Used by Tanna peon.	
	Do. ..	Garden shed ..	Narsápur ..	10 0 0	Do.	Used by gardener.	
	Do. ..	Do. ..	Bendamurlanka.	10 0 0	Do.	Do.	

Kistna.	Vinukonda range.	Rest-house ..	Remidicherla ..	1,680	0	0	Tiled house	By District Forest-officer and Range officers on tour of inspection. Also by other officers and private individuals on payment of rent to Government.	Rs. 108 were sanctioned for certain repairs and Rs. 53-2-0 were spent for cutting 22 yepi posts in its connection. But the original estimate was revised and Rs. 480 have been sanctioned to be spent in 1893-94. The posts cut at a cost of Rs. 53-2-0 are proposed to be sold.
	Do. ..	Do. ..	Bollapalli ..	1,138	0	0	....	....	Built during the year 1892-93.
	Do. ..	Do. ..	Mellavagu ..	..			....	....	Transferred from Public Works Department.
	Do. ..	Do. ..	Ravulapuram ..	..			....	....	Wanting slight repairs.
	Do. ..	Range office ..	Vinukonda ..	..			Thatched building	By District Forest-officer and Range officers on tour of inspection. Also by other officers and private individuals on payment of rent to Government.	Do. do.
	Do. ..	Watcher's house.	Remidicherla ..	53	0	0	....	Watcher's residence.	
	Do. ..	Gardener's house.	Do. ..	57	0	0	....	Gardener's residence.	
	Do. ..	Forest guard's house.	Birizepalli ..	62	0	0	....	Forest guard's residence.	
	Do. ..	Watcher's house.	Do. ..	51	0	0	....	Watcher's residence.	
	Bandar ..	Do. ..	Yelachetladibba.	25	0	0	....	Do. ..	
	Do. ..	Do. ..	Nachugunta ..	25	0	0	....		
	Do ..	Do. ..	Tummalapalem.	25	0	0	....		
	Do. ..	Forest guard's house.	Gullalabodu ..	24	0	0	....	Forest guard's residence.	Fell down.
	Do. ..	Do. ..	Wupakali ..	24	0	0	....		
	Do. ..	Do. ..	Lakshmipuram..	25	0	0	....		
	Do. ..	Tanna station ..	Pedapalem ..	24	0	0	....	Office of the license issuing gumastah.	
	Do. ..	Gardener's house.	Gopuvanipalem..	25	0	0	....		One fell down.
	Do. ..	Two do. ..	Weld plantation.	50	0	0	....	Used by gardeners ..	Rs. 8-0-4 were spent in repairs during 1892-93.
	Do. ..	One do. ..	Allinagaram ..	5	0	0	....		In good order.
	Do. ..	Rest-house ..	Do. ..	35	0	0	....	Forester's rest-house and office on tour	Rs. 8-1-0 were spent during 1892-93. In good order.
	Bapatla ..	Forest guard's house.	Kothapalem ..	30	0	0	....	Forest guard's residence.	
	Do. ..	Tanna	Do. ..	30	0	0	....	Tanna office.	
	Do. ..	Store-house ..	Do. ..	30	0	0	....	Forester's rest-house and office.	
	Do. ..	Forest guard's house.	Lankavanidibba.	35	0	0	....	Forest guard's residence.	
	Do. ..	Watcher's house.	Do. ..	35	0	0	....	Watcher's residence.	
	Do. ..	Tanna	Do. ..	35	0	0	....	Tanna office	In good order.
	Do. ..	Store-house ..	Do. ..	35	0	0	....	Forester's office and rest-house on tour.	
	Do. ..	Forest guard's house.	Perali	45	0	0	....	Watcher's residence	
	Do. ..	Tanna	Waderevu ..	3	0	0	....	Forester's office and rest-house on tour.	

Statement showing list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					NORTHERN CIRCLE—*cont.*		
Kistna—*cont.*	Sattenapalle range.	Rest-house ..	Bellamkonda ..	Rs. A. P. 2,000 0 0	....	By District Forest-officers on tour of inspection.	Rs. 5-14-0 were spent for petty repairs during 1892-93. In good order.
	Do. ..	Forest guard's house.	Venkatayapalem.	36 0 0	....		
	Do. ..	Do. ..	Turikepalli ..	35 0 0	....		
	Do. ..	Do. ..	Papayapalem *..	40 0 0	....	Forest guard's residence .	*Rs. 2-10-0 were spent for petty repairs during 1892-93. In good order.
	Do. ..	Do. ..	Mannesullan-palem. †	40 0 0	....		† Do. do.
	Do. ..	Tanna	Yemmajigudem.	40 0 0	....	Forester's office and rest-house on tour.	Rs. 5-6-0 were spent for petty repairs during 1892-93. In good order.
	Guntúr range.	Rest-house ..	Kondavid hill ..	1,000 0 0	....	By District Forest-officers on tour of inspection.	In repair.
	Do. ..	Guard's house ..	Do. ..	50 0 0	....	Guard's residence	Do.
	Do. ..	Tanna	Guntúr	6 0 0	....	Tanna office	Fell down.
	Do. ..	Two tannas ..	Kondavid reserve.	Written off stock under Conservator's No. 1700-A of 2nd February 1893.			
	Bezvada range.	Rest-house ..	Kondapalli hill..	1,000 0 0	....	By District Forest officer on tour of inspection.	In repair.
	Do. ..	Do. ..	Vellatur ..	....	....	Forester's rest-house on tour.	Transferred from Public Works Department. Wanting slight repairs.
	Do. ..	Tanna	Kondapalli ..	25 0 0	....	Tanna office	Do. do.
	Do. ..	Forest guard's house.	Kondur ..	40 0 0	....	Forest guard's residence ..	Do. do.
	Do. ..	Gardener's house.	Bezvada garden	3 0 0	....	Gardener's shed	Do. do.
	Do. ..	Four store sheds.	Kondapalli hill. .	26 0 0	....	For shelter to coolies and keeping tools.	Spent during 1892-93.
	Do. ..	Inspection shed.	Gavaravaram ..	..	....	Old Police station used for Foresters on tour of inspection.	*Vide* Government Order, No. 1455 W., Public Works, dated 1st June 1893.
	Palnád range	Watcher's house.	Davupalli ..	18 0 0	....	Watcher's rest-house	
	Muchukota.	Head-quarter's bungalow and out-houses.	Anantapur	6,000 0 0 991 0 0	Two stoned tiled building with 4 rooms, 2 dressing rooms and bath-rooms, store-rooms, servants' quarters and stables.	Residence of District Forest-officer.	
	Dharmavaram.	Bungalow ..	Golla	1,500 0 0	Two rooms with bath-rooms, arched roof	Inspection bungalow.	
		Range office and residence.	Dharmavaram ..	470 0 0	One large and 3 small rooms, flat roof	Range officer's residence and office.	
	Gooty ..	Bungalow ..	Páthakottacheru.	1,500 0 0	One large, 1 small room, 2 bath-rooms, tiled roof; 2 rooms flat-roof.	Inspection bungalow ..	Transferred from Local Fund Department—*vide* G.O., No. 263-L, dated 17th March 1891.
Anantapur.	Penukonda.	Range office ..	Bukkapatnam ..	492 0 0	Two rooms, flat-roof	Range office.	
		Rest-house ..	Konappanayanipalli.	800 0 0	Two rooms and bath-room, tiled roof	Inspection bungalow.	
		Do. ..	Penukonda hill.	500 0 0	Two rooms and 2 small rooms in buttresses of the old fort; large rooms have thatched roof.	Do.	
	..	Two Forest guard's sheds.	....	40 0 0	....	....	

Bellary..	Kalyandrug.	One Forest guard's shed.	....	72	0	0	....	....	
	Nyalakota..	Do. ..	....	70	0	0	....	....	
	Muchukota.	Do. ..	....	80	0	0	....	....	
	Bukkapatnam.	One Tannah hut.	....	60	0	0	....	....	
	Sandúr ..	Range-house ..	Sandúr	1,326	9	9	Flat soudu-roof with out-houses. It contains 5 rooms and a verandah.	Used by the Range officer.	
	Do. ..	Tool-shed ..	Do.	40	0	0	Flat soudu-roof	Used for keeping the tools of the Range officer.	Now collapsed.
	Do. ..	Rest-house at Donimalai.	On the top of Donimalai.	672	4	0	Thatched building with a big room and 2 bath-rooms and a verandah on three sides.	Rarely used by officers as there is no water near.	
	Bellary ..	Tanna-shed, Kuditini.	Kuditini ..	13	0	0	Thatched building	Used as a Forest tanna.	
							Former Head-quarter's Bungalow.		
Kurnool.	Nandyal ..	Nandyal bungalow.	Nandyal ..	10,000	0	0	Consists of two stories; the lower terraced and planked and the upper tiled. The lower story consists of two main rooms of $14\frac{1}{2}' \times 14'$ and two side rooms of $14' \times 6\frac{1}{2}'$. The upper one contains 2 main rooms of $15' \times 14\frac{1}{2}'$ and a side room $8\frac{1}{4}' \times 7'$; has also an out-house and a stable attached.	Used by District Forest-officer as an inspection house.	
							Rest or Inspection houses.		
	Nandyal ..	Rest-house ..	Paniem ..	750	0	0	Terraced. Consists of two main rooms of $18\frac{1}{2}' \times 16'$ and two side rooms of $16' \times 10'$ divided into compartments. Has also an out-houses and a stable.	Used by superior Forest-officers on inspection duty.	
	Do. ..	Do. ..	Gazulapalle ..	500	0	0	Terraced. Consists of one main room of $18\frac{1}{2}' \times 16'$ and two side rooms of $36' \times 10'$, of which one is divided into three compartments. Has also an out-house and a stable house with thatch roofing.	Do. do.	
	Do. ..	Do. ..	Chelema ..	600	0	0	Terraced and the middle or raised roof covered with corrugated iron. Has also a mud terraced out-house and a thatched stable house.	Do. do.	
	Do. ..	Do ..	Baswapur ..	1,500	0	0	Terraced. Consists of two main rooms $18\frac{1}{2}' \times 16'$ and two side rooms of $36' \times 10'$ each divided into three compartments. Has also a thatched out-house.	Do. do.	
	Nandikotkur	Do. ..	Bairnuti ..	1,175	0	0	Masonry building (stone and mortar) flat pucca roof covered with gabled thatched roof. Consists of one room $30' \times 16'$. A wooden partition screens off a small space for a bath room. Has also two thatched out-houses with bamboo hurdle walls.	Do. do.	
	Do. ..	Do. ..	Rollapenta ..	1,200	0	0	Same as the building at Bairnuti, except that the flooring is of stone.	Do. do.	
	Cumbum ..	Do. ..	Adutla ..	350	0	0	....	Do. do.	
	Markapur ..	Do. ..	Mantrala ..	650	0	0	Thatched building consisting of one main room 16 square, one bath-room $8\frac{1}{4}' \times 7\frac{1}{2}'$, and two verrandahs, front and rear, $19' \times 9\frac{1}{2}'$ and $9\frac{1}{2}' \times 8\frac{3}{4}'$ respectively.	Do. do.	
	Cumbum ..	Do. ..	Giddalur ..	100	0	0	Thatched building	Do. do.	
	Do. ..	Do. ..	Paininipalle ..	690	0	0	Masonry building consisting of one main room $16' \times 14'$ and a bath-room $8'$ square with a verandah all round.	Do. do.	
							Range Offices.		
	Markapur ..	Range office building.	Dornal ..	250	0	0	Thatched building with mud walls all round	Range officer's office building.	
	Nandikotkur	Do. ..	Atmakur ..	200	0	0	....	Do. do.	

Statement showing list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					NORTHERN CIRCLE—*cont.*		
					Range Rest-houses.		
				RS. A. P.			
Kurnool —*cont.*	Nandikotkur	Range Rest-house	Karredulagundam.	70 0 0	Thatched bamboo hurdle shed, consists of one room 42′ × 18′, three chenchu huts attached as out-houses.		
	Do. ..	Do. ..	Rudrakodu ..	125 0 0	Do. do. do. ..		
	Do. ..	Do. ..	Buggapenta ..	125 0 0	Do. do. do. ..		
	Do. ..	Do. ..	Pecheruvu ..	125 0 0	Thatched bamboo hurdle shed consisting of one room ..		
	Do. ..	Do. ..	Gundlabrahmeswaram.	30 0 0	....	Used by Range officer when on inspection.	
	Nandyal ..	Do. ..	Mallalamma ..	150 0 0	Thatched shed of 36′ × 22′ enclosed by tatty walls ..		
	Markapur ..	Do. ..	Chintal ..	100 0 0	Thatched building 31′ × 18′		
	Do. ..	Do. ..	Chennepalle ..	100 0 0	Do. do.		
	Do. ..	Do. ..	Mantrala ..	140 0 0	Do. with bamboo tatty walls		
	Sirvel ..	Do. ..	Ullada ..	50 0 0	....		
					Forest Guards' and Tannadars' Huts.		
	Markapur ..	Forest Guards' hut.	Bommalapur ..	240 0 0	Thatched building consisting of three rooms, one 34′ × 8½′ and the other two 16¼′ × 8½′ each.	Occupied by the Forest Guard and Tannadar.	
	Nandyal ..	Tannadar's hut	Bukkapur ..	55 0 0	Thatched building 27′ × 18′ with bamboo tatty walls ..	Used by the Tannadars.	
	Do. ..	Do. ..	Baswapur ..	55 0 0			
	Do. ..	Do. ..	Singaveram ..	55 0 0			
	Do. ..	Do. ..	Narayanapuram.	55 0 0			
	Nandikotkur	Do. ..	Velgode ..	45 0 0			
	Do. ..	Do. ..	Siddepalle ..	45 0 0			
	Do. ..	Do. ..	Banumukula ..	33 0 0			
	Do. ..	Do. ..	Guvvulakunta ..	23 0 0			
	Do. ..	Do. ..	Bairnuti ..	23 0 0			
	Do. ..	Do. ..	Venkatapuram ..	40 0 0			
	Do. ..	Do. ..	Ramapuram ..	18 0 0			
	Do. ..	Do. ..	Musalimadugu ..	15 0 0			
	Do. ..	Do. ..	Niddimamidi ..	9 0 0			
	Do. ..	Do. ..	Yerrakonda ..	13 0 0			
	Nandyal ..	Do. ..	Torwamitta ..	18 0 0			
	Do. ..	Do. ..	Mallalamma ..	13 0 0			
	Sirvel ..	Do. ..	Bandlagadda ..	45 0 0	Thatched bamboo hurdle shed	Do. do.	
	Do. ..	Do. ..	Galeru ..	33 0 0			
	Do. ..	Do. ..	Leoddi ..	13 0 0			
	Do. ..	Do. ..	Cuddapah Frontier.	9 0 0			
	Cumbum ..	Do. ..	Bodi Torwa ..	9 0 0			
	Do. ..	Do. ..	Digomitta ..	9 0 0			
	Do. ..	Do. ..	Pullalacheruvu.	9 0 0			
	Do. ..	Do. ..	Akavid ..	13 0 0			
	Do. ..	Do. ..	Velagalapaya ..	15 0 0			
	Do. ..	Do. ..	Papinenipalle ..	13 0 0			
	Do. ..	Do. ..	Gundlamotu ..	13 0 0			
	Markapur ..	Do. ..	Chintal ..	13 0 0			
	Do. ..	Do. ..	Chennepalle ..	13 0 0			

Nellore ..	..	Udayagiri bungalow.	Udayagiri ..	Not given ..			....	....	
		Office building ..	Sriharikot ..	Do. ..			....	....	
		Store shed ..	Do. ..	890	0	0	....	....	
	Kódúr ..	Inspection bungalow.	Kódúr	3,000	0	0	Tiled roof with brick in chunam walls; tiled out-houses, 2 rooms 18 × 20, 2 dressing and 2 bath rooms, 2 verandahs.	Used by Superior officers on inspection duty.	
		Rest-house ..	Balapalle ..	400	0	0	Thatched building with thatched out-houses; 1 room 20 × 20, 1 bath and 1 store room and 2 verandahs; walls stone in mud.	Used by Superior and Range officers on inspection duty.	
		Inspection bungalow.	Do. ..	1,125	0	0	Tiled roof with stone in chunam walls, 2 rooms about 14 × 16, 2 bath-rooms; verandah on all sides.	Used by Superior officers on inspection duty.	
		Rest-house ..	Magilipenta ..	800	0	0	Tin-roofed building with thatched out-houses and stone in chunam walls; 1 room 12 × 12, 1 room 12 × 9, 2 bath-rooms 4 × 4.	Used by Superior and Range officers on inspection duty.	
	Sidhout ..	Inspection bungalow.	Vontimitta ..	1,400	0	0	Tiled building with tiled out-houses with brick in chunam walls; 2 rooms 18 × 20, 2 bath-rooms and 2 verandahs.	Used by Superior officers on inspection duty.	
		Rest-house ..	Lankamalais ..	945	0	0	Tiled roof, walls stone in mud; 1 room 15 × 13, 2 bath-rooms, front and back verandah, out-houses tiled, stone in mud, 2 rooms and 3 stalls.	Do. do.	
	Madanapalle.	Inspection bungalow.	Horsleykonda ..	3,300	0	0	Tiled building with tiled out-houses with brick and stone in chunam walls; 3 rooms 20 × 20, 2 dressing, 5 bath, 1 matie and 1 store room.	Do. do.	
	Ráyachóti	Do. ..	Sampaya ..	1,700	0	0	Thatched building with thatched out-houses and brick in mud walls; 2 rooms 16 × 12, 2 bath-rooms and 2 verandahs.	Do. do.	
		Rest-house ..	Kortimadugu ..	900	0	0	Tiled roof; walls stone in mud; 1 room 15 × 13; 1 room 14 × 7, 2 bath-rooms, front and back verandah; out-houses tiled stone in mud, 2 rooms and 3 stalls.	Do. do.	
Cuddapah.	Vayalpad ..	Inspection bungalow.	Pílér	200	0	0	Thatched building, walls brick in mud; 2 rooms about 15 × 12 each, 2 bath-rooms, 1 front verandah, out-houses flat-roofed, 2 small rooms.	Do. do.	
	Kódúr ..	Range house ..	Kódúr	1,200	0	0	Tiled roof with tiled out-house and brick in chunam and mud walls; 3 rooms 13½ × 12, 1 bath-room 13½ × 6 and verandah on 3 sides.	Extra Assistant Conservator's residence.	
	Rázampét ..	Do. ..	Rázampét ..	350	0	0	Tiled roof with thatched out-houses and brick in mud walls; 1 room 12 × 10, 1 room 10 × 8, 3 small rooms 6 × 10 each.	Range officer's residence.	
	Sidhout ..	Do. ..	Sídhout ..	500	0	0	Do. do. do. ..	Do. do.	
	Badvel ..	Do. ..	Badvel ..	800	0	0	Do. do. do. ..	Do. do.	
	Ráyachóti ..	Do. ..	Ráyachóti ..	400	0	0	Do. do. but no out-houses ..	Do. do.	
	Kódúr ..	Office building ..	Kódúr	130	0	0	Tiled building, 18 × 10, with stone in mud walls ..	Extra Assistant Conservator's and Kódúr Range office.	
	Sidhout ..	Depôt house ..	Vontimitta ..	250	0	0	Terraced building with stone in mud walls; 1 room 17 × 10 and 1 yard 30 × 17.	Storing minor forest produce and timber.	
	Ráyachóti.	Do. ..	Kurappalle ..	180	0	0	Terraced roof with stone in mud walls; 1 room 17 × 20 and 1 yard 30 × 17.	Do. do.	
		Do. ..	Polisettivandlapalle.	16	0	0	Thatched roof with stone in mud walls; 1 room 12 × 12.	Do. do.	
	Kódúr ..	Tannah house ..	Kódúr	100	0	0	Tiled roof with stone in mud walls	Tannadar's residence and store-room for perishable produce.	

Statement showing list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					CENTRAL CIRCLE.		
Cuddapah —*cont.*	Kódúr, Sidhout, Badvel and Cuddapah.	Forest inspection sheds.	In ten places ..	Rs. A. P. 254 0 0	Thatched roofs with stone in mud walls; generally 1 room 12 × 12 and bath-room.	Used by Superior and Range officers on inspection duty.	
	All ranges.	Forest guards' and tannadars' huts.	In sixty-five places.	814 0 0	Thatched roof with mud walls; generally 1 room 12 × 12 and verandah.	Guards' residence and tannadars' docketing stations.	
	Kódúr, Badvél and Cuddapah.	Huts and sheds in topes.	In six places ..	83 0 0	Thatched roofs with mud walls; generally 1 room 12 × 12 and verandah.	Used by Superior and Range officers on inspection duty.	
	Kódúr ..	Depôt peons' huts.	In three places..	45 0 0	Do. do. do. ..	Depôt peon's residence.	
Chingleput.	Chingleput.	1. Chingleput ..	Forest Department.	..	Two rooms divided by an arch and another small room separated by a court-yard from the main building. Out-house used as a kitchen. This building is used as an office and is not available for travellers.	A charge of 8 annas a day or a portion of a day of 24 hours is made for all save those which are used as Range offices in which no accommodation can be had. Nos. 1 to 6 are tiled and No. 7 thatched.	Food cannot be had.
	Do. ..	2. Nellikuppam.			One room 12 × 10 } main buildings, not furnished.		
	Tiruvallúr..	3. Periakuppam.			One room 8 × 10 }		
	Do. ..	4. Nagalapuram.			One kitchen and 2 godowns.		
	Do. ..	5. Sattiyavedu.			Two small rooms not furnished.		
	Do. ..	6. Varadiapalayam.			Two small rooms. Out-houses consist of a kitchen and stable for one horse, unfurnished; kitchen and stable for one horse used as an office; kitchen and stable for one horse, not furnished; 2 small rooms. Out-houses consist of a kitchen and stabling for one horse.		
	Do. ..	7. Kambakkam hill.					
	Chittoor ..	Rest-house ..	Paradarami ..	250 0 0	Thatched roof 26′ × 16′	Used by Forest-officers.	
	Do. ..	Bungalow ..	Nangamangalam.	500 0 0	Do. 27′ × 30′	Do.	
	Do. ..	Range office ..	Chittoor ..	68 0 0	Tiled roof 21′ × 21′	Used for Range office ..	Given over by Public Works Department.
	Chandragiri.	Rest-house ..	Panapakam ..	100 0 0	Thatched roof 31′ × 30′	Used by Forest-officers.	
	Do. ..	Inspection hut ..	Napier hut ..	20 0 0	Do. 12′ × 12′	Do.	
	Do. ..	Rest-house ..	Nagapatla ..	336 0 0	Do. 50′ × 33′	Do.	
	Do. ..	Do. ..	Mamandur ..	330 0 0	Do. 31′ × 31′	Do.	
	Do. ..	Big bungalow ..	Panapakam ..	437 0 0	Do. 50′ × 33′	Do.	
	Do. ..	Range office ..	Chandragiri ..	1,300 0 0	Tiled roof 28′ × 21′	Used for Range office.	
	Do. ..	Inspection hut ..	Tirupati hill ..	20 0 0	Thatched roof 12′ × 12′	Used by Forest-officers.	
	Do. ..	Do. ..	Mavidimannu chellama.	50 0 0	Thatched roof	Do.	
	Palmanér ..	Bungalow ..	Naickaneri ..	255 0 0	Tiled roof 40′ × 34′	Do.	Given over by District Board
	Do. ..	Do. ..	Palmanér ..	1,000 0 0	Do. 53′ × 33′	Used for Rangers' quarters and office.	
	Do. ..	Rest-house ..	Do. ..	200 0 0	Thatched roof 40′ × 20′	Used by Forest-officers.	
	Do. ..	Do. ..	Peddur ..	205 0 0	Do. 35′ × 24′	Do.	
	Do. ..	Do. ..	Nellipatla ..	100 0 0	Do. 24′ × 24′	Do.	
	Do. ..	Bungalow ..	Mordana ..	1,315 0 0	Tiled roof	Do.	

North Arcot.	Gudiyáttam.	Rest-house ..	Sainagunta ..	150	0	0	Thatched roo	18′ × 25′	Do. do.	
	Do. ..	Do. ..	Ammandi ..	30	0	0	Do	17′ × 12′	Do. do.	
	Do. ..	Do. ..	Tiruvallam block No. 3.	76	0	0	Do.	33′ × 33′	Do. do.	
	Do. ..	Do. ..	Virinjipuram, block No. 4.	190	0	0	Do.	34′ × 34′	Do. do.	
	Do. ..	Do. ..	Virinjipuram, block No. 3.	28	0	0	Do.	29′ × 25′	Used for Foresters' quarters.	
	Vellore ..	Do. ..	Naickanery ..	40	0	0	Do.	24′ × 24′	Used by Forest-officers.	
	Do. ..	Do. ..	Ambur ..	180	0	0	Tiled roof	35′ × 33′	Do.	
	Do. ..	Do. ..	Odugathur ..	655	0	0	Do.	.. ..	Do.	
	Do. ..	Bungalow ..	Kailasagiri ..	819	0	0	Do.	.. ..	Do.	
	Pólúru ..	Big bungalow ..	Amerdi ..	650	0	0	Thatched roof	51′ × 31′	Used by District Forest-officer	
	Do. ..	Small do. ..	Do. ..					30′ × 30′	Used by Range officer.	
	Do. ..	Bungalow ..	Mandaparai ..	1,556	0	0	Tiled roof	63′ × 22′	Used by District Forest-officer.	
	Do. ..	Big bungalow ..	Patrakad ..	377	0	0	Thatched roof	52′ × 30′	Do. do.	
	Do. ..	Small do. ..	Do. ..					29′ × 29′	Used by Range officer.	
	Do. ..	Big do. ..	Karnaticghur ..	542	0	0	Do.	48′ × 27′	Used by District Forest-officer.	
	Do. ..	Small do. ..	Do. ..					32′ × 27′	Used by Range officer.	
	Do. ..	Big do. ..	Bagmarpet ..	704	0	0	Do.	70′ × 38′	Used by DistrictForest-officer.	
	Do. ..	Small do. ..	Do. ..					36′ × 21′	Used by Range officer.	
	Do. ..	Tannah house ..	Attimur ..	104	0	0	Do.	42′ × 27′	Used by Forest-officers.	
	Do. ..	Do. ..	Attuvambadi ..	156	0	0	Do.	42′ × 27′	Do.	
	Do. ..	Rest-house ..	Santavasal ..	50	0	0	Do.	42′ × 27′	Do.	
	Do. ..	Bungalow ..	Gangavaram ..	947	0	0	Tiled roof	.. ..	Do.	
	Do ..	Stable ..	Santavasal ..	18	0	0	Thatched roof	.. ..	Do.	
	Do. ..	Bungalow ..	Mulacad ..	268	0	0	Do	.. .. —	Do.	
	Do. ..	Kitchen ..	Karnaticghur ..	22	0	0	Do.	.. ..	Do.	
	Arcot ..	Bungalow ..	Kilminnel ..	434	0	0	Thatched roof	58′ × 35′	Do.	
	Walajah ..	Rest-house ..	Arkonam ..	529	0	0	Do.	16′ × 16′	Do.	
	Do. ..	Do. ..	Banavaram ..	510	0	0	Do.	16′ × 16′	Do.	
	Do. ..	Do. ..	Ranipet ..	205	0	0	Tiled roof	70′ × 30′	Used for Range office ..	Given over by Public Works Department.
	Do. ..	Stable ..	Banavaram ..	37	0	0	Thatched roof	.. ..	Used by Forest officers.	
	Wandiwash.	Bungalow ..	Nedungunam ..	428	0	0	Tiled roof	.. ..	Do.	
	Do. ..	Stable	Do. ..	50	0	0	Do.	.. ..	Do.	
	Tiruvannámalai.	Range office ..	Tiruvannámalai.	* 500	0	0	Tiled building with verandahs on three sides; walls brick in chunam. Its extent is $58\frac{1}{4}' \times 35'$; has 5 rooms with a kitchen and stable both thatched— 2 rooms measuring $16' \times 14'$ each. 1 room ,, $18\frac{1}{2}' \times 7'$. 2 rooms ,, $14\frac{1}{2}' \times 7$ each. Kitchen ,, $26' \times 12\frac{1}{2}'$ Stable ,, $38\frac{1}{2}' \times 13\frac{1}{2}'$	Used as Forest Range office and Sub-division Forest office	* Excludes sums spent on petty repairs. Not available for occupation by officers of other departments and private individuals.
	Do. ..	Tanna	Do. ..	30	0	0	Tiled building with mud walls, $27\frac{1}{2}' \times 22\frac{1}{4}'$; has 2 verandahs $27\frac{1}{2}' \times 5\frac{1}{3}'$ each and room $10' \times 10'$.	Used as a Permit Recovering office.	
South Arcot.	Do. ..	Rest-house ..	At foot of Kavuttumalai hills.	1,166	0	0	Tiled building with brick in chunam walls for the outer walls and in mud for the inner walls. Its extent is $28\frac{1}{2} \times 25\frac{1}{2}$. It has 3 rooms, 2 measuring $12\frac{3}{4} \times 9\frac{1}{4}$; 1 measuring $12' \times 6$; 2 verandahs, 1 measuring $25' \times 6'$ and 1 measuring $13' \times 6'$.	Used by Forest-officers when on inspection duty.	The building was burnt.
	Do. ..	Depôt	Tukkapet (Chengam).	555	0	0	Tiled building with brick in chunam walls. Verandahs on 3 sides; has 4 rooms; extent $47\frac{1}{2}' \times 31\frac{1}{2}'$— 2 large rooms measure $14' \times 8'$ each. 1 large verandah measures $47\frac{1}{2}' \times 7\frac{1}{4}'$. 2 small verandahs measure $10\frac{1}{2} \times 7\frac{1}{4}$ each. 1 thatched stable measures $13' \times 13'$. 1 thatched kitchen measures $12\frac{1}{2}' \times 12\frac{1}{2}'$.	Do. do. ..	Do. do.

A detailed list of completed Forest buildings in the South Arcot district with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					CENTRAL CIRCLE—*cont.*		
South Arcot —*cont.*	Tiruvannámalai.	Rest-house ..	Thenmalai ..	Rs. A. P. 1,697 0 0	Tiled building with brick in chunam walls. Extent 52′ 5″ × 34′ 4″. Has verandahs on three sides and 5 rooms, one stable and a kitchen with mud wall. 2 rooms measure 17′ 11″ × 17′ 4″ each. 3 do. do. 18′ 6″ × 8′ 4″ each. 1 verandah measures 52′ 5″ × 8′ 4″ 2 verandahs measure 26′ × 8′ 4″ 1 kitchen measures 50′ × 10′ 1 stable do. 13′ × 5′	Used by Forest-officers when on inspection duty.	Available for use of officers of other departments.
	Tindivanam.	Inspection shed.	Shanikulam ..	511 0 0	Tiled building with brick walls and with verandahs on two sides. Extent .. { 27½′ × 17¾′ / 20¼′ × 15¾′ } has 3 rooms. One kitchen thatched 47½′ × 27′.	Do. do. ..	Do. do.
	Do. ..	Rest-house ..	Do. ..	300 0 0	Tiled building with brick walls and with verandahs on four sides and 4 rooms. Its extent is 47½′ × 27½′. 1 Front verandah 47½′ × 6′. 1 rear do. 22½′ × 6′. 2 side verandahs 12¼′ × 6′ each. 1 thatched kitchen 33′ × 14′.	Permanently occupied as Forest Range office.	Not available for use of officers of other departments.
	Do. ..	Depôt	Tindivanam ..	50 0 0	Tiled building with mud walls and with one room; extent 30′ × 11′. 1 verandah 9′ × 6′.	Used as depôt whenever necessary.	Not fit to be used as a rest-house.
	Do. ..	Police bungalow.	Do. ..	Not known.	Tiled building with brick walls; has 3 large rooms and bath-rooms with 2 verandahs and a pucka tiled kitchen. Extent 73′ × 30¼′. Front verandah measures 73′ × 6′. Rear do. do. 53′ × 6′. Kitchen do. do. 28½′ × 16½′.	Not used by the Forest Department. At present lent to Salt Department for temporary occupation.	In need of great repairs. Not fit for permanent occupation. Handed over to forests by the Public Works Department.
	Villupuram.	Old Court-house.	Villupuram ..	Do. ..	Tiled building with brick in chunam walls and verandahs on three sides; has 3 rooms; extent about 1,200 square feet.	Presently used as Forest Range office.	Not available for use of officers of other departments. The building is under repair.
	Tirukkóyilúr.	Range office ..	Tirukkóyilúr ..	..	Tiled building with walls brick in chunam. Its extent is 32′ × 32′; has 2 main and 2 rear rooms; one verandah in front 32′ × 6′.	Permanently occupied as range office.	Not available for use by officers of other departments.
	Kallakurchi.	Do. ..	Kallakurchi ..	1,327 0 0	Tiled building with brick in chunam walls with 3 verandahs and 2 rooms; extent is 1,200 square feet. Front verandah measures 43′ 8″ × 7′ 6″. 2 side verandahs 33′ × 7′ 6″ each.	Do. do. ..	Do. do.
	Do. ..	Rest-house ..	Kalpadi ..	450 0 0	Tiled building with brick in mud walls with 2 rooms. Its extent is 32′ × 13′.	To be used as a rest-house by Forest officers when on inspection duty.	Available for officers of other departments.
Tanjore.	Northern range.	Residence and Range office.	Tirumalaivasal..	292 0 0	Thatched building containing 6 rooms	As the Ranger's quarters and his office.	

	Kulitalai ..	Rest-house ..	Elamanur ..	..	Thatched building, 2 rooms and out-houses	Used by Inspecting officers ..	Value not known.
	Do. ..	Do. ..	Pudupalaiyam ..	1,000 0 0	Tiled building, 8 rooms and out-houses	....	Transferred from Local Fund Department.
	Do. ..	Do. ..	Kalpatti ..	150 0 0	Tiled building, 3 rooms and out-houses	....	
	Do. ..	Do. ..	Lalapet ..	80 0 0	Thatched, 2 rooms and out-houses	....	
	Do. ..	Do. ..	Kattalai ..	80 0 0	Do. do.	....	
	Musiri ..	Rest-house on the Pachamalai.	Singathipatti ..	477 0 0	....	....	
Trichinopoly.	Udayárpálaiyam.	Tanna ..	Ponparappi ..	15 0 0	....	....	
	Do. ..	Do. ..	Thavadanallur ..	* 15 0 0	....	....	
	Do. ..	Do. ..	Kundaveli ..	* 15 0 0	....	....	* Written off.
	Do. ..	Do. ..	Lower anicut ..	15 0 0	....	....	
	Do. ..	Do. ..	Madanathur ..	15 0 0	....	....	
	Do. ..	Do. ..	Tirumanur ..	* 15 0 0	....	....	
	Do. ..	Do. ..	Kilapalur ..	* 15 0 0	....	....	* Do.
	Do. ..	Range office ..	Jayankondacholapuram.	230 0 0	Tiled building, 2 rooms and out-houses	....	
	Salem East Range.	Salem East Range office, including sandalwood godown.	Salem	2,982 2 0	Tiled roof with brick walls 59′ 6″ × 36′ 6″; 53′ 6″ × 29′ 7″; 70′ × 3′.	Salem East and West Range officers.	
	Do. ..	Hasthampatti forest bungalow with out-house.	Hasthampatti ..	45 3 6	Tiled roof with brick walls 55′ × 38′ 3″ and 12′ × 18′; 36′ × 25′ 6″.	Dwelling-house rented.	
	Do. ..	Tanna shed on the Shevaroys.	On the Shevaroy Hills at Yercaud.	..	Tiled 20′ 3″ × 15′ 9″	Dwelling-house.	
	Do. ..	Tannah shed in Kurambapatti.	Gollapatti road.	107 15 0	Thatched 13′ 6″ × 10′ 6″	Tanna station.	
	Salem West Range.	Mullapuram bungalow.	Near Mullapuram station.	Not known.	Tiled roof with brick walls, length 23½ yards, breadth 11½ yards.	Forest rest-house.	
	Atur Range.	Atúr Forest Range office.	Atúr	404 12 6	Tiled roof with brick walls east to west 44 feet and north to south 25½ feet.	Forest Range office.	
	Do. ..	Atúr Shandy Tope building.	Shandy Tope, Atúr.	Not known.	Tiled east to west 4½ feet and north to south 20½ feet ..	Not used.	
Salem ..	Námakkal Range.	Námakkal Forest Range office.	Námakkal ..	Do.	Tiled 30′ × 27′	Forest Range office.	
	Do. ..	Námakkal outhouse.	Do. ..	Do.	Thatched 27′ × 18′	Godown, kitchen and stable.	
	Do. ..	Puliamsolai watchers' hut.	Puliamsolai ..	46 2 4	Do. 22′ × 16′	Watchers' hut.	
	Do. ..	Karavallikombai hut.	Karavallikombai.	46 2 4	Do. 22′ × 16′	Do.	
	Do. ..	Valappur forest hut.	Valappur ..	31 2 4	Do. 30′ × 21′	Used for camp.	
	Do. ..	Saithoopola forest hut.	Saithoopola ..	10 0 0	Do. 30′ × 24′	Do.	
	Do. ..	Puttúr forest hut.	Puttúr ..	10 0 0	Do. 27′ × 21′	Do.	
	Do. ..	Pudursolapatti forest hut.	Pudursolappatti.	10 0 0	Do. 21′ × 15′	Do.	
	Uttankarai Range.	Harur Forest Range office.	Harur	Not known.	Tiled 26′ × 21′	Forest Range office.	
	Do. ..	Arbuthnot Tope shed.	Do.	Do.	Do. 35′ × 22′	Not used.	

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

CENTRAL CIRCLE—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
				RS. A. P.			
Salem—*cont.*	Uttankarai range.	Atkinson tope shed.	Harur	Not known.	Tiled 25′ × 10′	Not used	
	Do. ..	Thirthamalai tope shed.	Thirthamalai ..	Do.	Do. 35′ × 22′	Do.	
	Do. ..	Chitteri rest-house.	On the Chitteri Hills.	150 8 0	Thatched 27′ × 21′	Rest-house.	
	Tiruppattúr range.	Tiruppattúr Forest Range office.	Tiruppattúr ..	1,382 0 0	Tiled 40′ × 38′	Forest Range office.	
	Do. ..	Alangayam tannah.	Alangayam ..	25 6 0	Thatched 12′ × 10′	Tannah station.	
	Do. ..	Andiappanur tannah.	Andiappanur ..	25 0 0	Do. 12′ × 10′	Do.	
	Do. ..	Andiappanur rest-house.	Do. ..	500 0 0	....	Rest-house.	
	Do. ..	Pulianoor tannah.	Pulianoor ..	25 0 0	Thatched 12′ × 10′	Tannah station.	
	Do. ..	Alangayam rest-house.	Alangayam ..	503 10 4	Tiled 27′ × 21′	Rest-house.	
	Do. ..	Singarapet rest-house.	Singarapet ..	703 9 0	Do. 27′ × 21′	Do.	
	Do. ..	Maharajagudai rest-house.	Maharajagudai ..	401 4 1	Tiled 27′ × 21′	Rest-house.	
	Do. ..	Krishnagiri Range office building.	Krishnagiri ..	1,531 9 1	....	Forest Range office.	
	Dharmapuri Range.	Dharmapuri Forest Range office.	Dharmapuri ..	Not known.	Tiled 74′ × 22¾′	Do.	
	Do. ..	Pennagaram depôt.	Pennagaram ..	180 0 0	Do. 53′ × 18½′	Used as depôt.	
	Do. ..	Muthugampatti Forest bungalow.	Muthugampatti.	Not known.	Do. 52′ × 15¼′	Rest-house.	
	Hosúr range	Denkanikóta Forest Range office.	Denkanikóta ..	1,205 15 4	Do. 144′ × 140′	Forest Range office.	
	Do. ..	Guard's hut at Anchetti.	Anchetti ..	38 0 0	Thatched 31′ × 14′	Guard's residence.	
	Do. ..	Anchetti rest-house.	Do. ..	150 0 0	Do. 27′ × 21′	Rest-house.	

SOUTHERN CIRCLE

Madura.	No. I Range, Cumbum.	Range officer's quarters and office.	Cumbum ..	1,256	0	0	The building is 45′ long and 30 broad, the floor being 2′ from ground level. The accommodation consists of one main room 15′ × 12′, two side rooms 12′ × 12′ each with a bath-room of 12′ × 6′. One of the side rooms is for office and behind it is another room 12′ × 6′ to be used for the custody of records, &c. There is also an out-house with kitchen 10′ × 10′ and stable. The foundation, basement and superstructure are all built of brick-in-mud and the roofing is with tiles, first-class wood being used for bressummers and wall plates. There is a verandah in front 45′ × 6′. Batten doors and windows are fixed. The walls are plastered and whitewashed.	Range officer's residence and office.
	Do. ..	Forester's quarters.	Gúdalúr ..	694	12	0	The building consists of 2 rooms 10′ × 10′ each, one bath-room 10′ × 6′, one office-room 10′ × 10′ and one store-room 10′ × 6′. There is a verandah in front 6′ wide and a small verandah at the back. The walls are built of brick and mud and plastered and white-washed. The roofing is made of second-class wood and bamboo reapers and covered with tiles. Wooden doors and windows are used. This is fenced in all round.	Residence and office of the Forester.
	Do. ..	Rest-house ..	Vannathiparai ..	70	0	0	This consists of mud wall and thatched roof and is 18′ square with 5′ verandah all round.	By the Range officer and the District Forest-officer when on inspection.
	Do. ..	Do. ..	Cumbum ..	70	0	0	Do. do. do. ..	By the Range officer only when on inspection.
	Do. ..	Do. ..	Uthamapoliem ..	127	12	0	This consists of mud wall and thatched roof and is 18′ square with 5′ verandah all round. There is also a kitchen.	....
	Do. ..	Do. ..	Combai ..	..			This is a pucka building with a terraced roof built of brick in mortar. It contains 2 rooms. It was formerly a Police station, on the abolition of which it was handed over to this department. Hence the cost of construction could not be known and has not been filled in.	Used by the Range officer and the District Forest-officer when on inspection.
	Do. ..	New rest-house.	Cumbum ..	1,200	0	0	The building consists of a central room (one main room) 18′ × 12′ and a side room 12′ × 4′ and 2 bath-rooms 6′ × 5½′ with a verandah in front 6′ wide and at side and passage in the rear between the baths. The walls are built of brick and mud and tiled with Calicut tiles.	....
	Do. ..	Out-houses to new rest-house.	Do. ..	215	0	0	The building is 4½ × 10½′. It consists of one kitchen 13 × 7½′ and one stable 9′ × 7′. The walls are built of un burnt brick-in-mud and the wood used is jungle wood.	....
	Do. ..	Watchers' quarters.	Do. ..	505	0	0	The building consists of 2 main rooms 12′ × 10′ each and a verandah in front 56′ wide. It is built of new brick in-mud and the roofing being with common tiles.	....
	Do. ..	Guards' and watchers' quarters.	Gúdalúr ..	616	0	0	The building is 36½′ × 34′. It consists of 3 rooms 12′ × 8′ and the other two 12′ × 10′ each and a verandah infront 5′ wide.	....
	Do. ..	Rest-house ..	Theni	775	0	0	The building is 28½′ × 21′. It consists of one main room 12′ × 12′. One bath-room 12′ × 6′ with a verandah 6′ wide. The walls are built of new bricks-in-clay and with tiled roof.	....
	Do. ..	New rest-house.	Vannathiparai ..	700	0	0	Do. do. do. ..	....

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					SOUTHERN CIRCLE—*cont.*		
Madura —*cont.*	No. II range, Kodaikánal.	Range officer's quarters.	Kodaikánal ..	Rs. A. P. 3,260 9 1	The building consists of 4 rooms measuring 12′ × 12′, 12′ × 4′, 12′ × 19½′ and 12′ × 9½′, respectively, 2 bath-rooms 12′ × 6′ and 19½′ × 6′ and one store-room 12′ × 6′ with verandah on two sides 6′ wide. There are also kitchen, stables and godown, the first 12′ × 6′ and the latter two 6′ × 6′ each.	Range officer's residence.	
	Do. ..	Range office ..	Do. ..	..	One room 14′ × 12′ is for office and another 10′ × 6′ is for the custody of records, &c. The walls are built of stone-in-mud and plastered and whitewashed. Roof consists of first-class vengai wood and is covered with Calicut tiles with the exception of kitchen, &c., the roofing of which is with corrugated iron sheets. Doors and windows are half glass and half pannelled.	The cost of this is also included in that of the Range officer's quarters.	
	Do. ..	Range clerk's quarters.	Do. ..	356 9 0	This consists of 2 rooms measuring 17½′ × 8′ and 8′ × 8′, respectively, with a verandah 11′ × 11′. The walls are built of stone-in-mud and roofing is made of Calicut tiles.	Range clerk's residence.	
	No. II range.	Depôt-keeper's quarters and store-rooms.	Gundan Shola ..	892 14 0	This consists of 4 rooms, 3 of 10′ × 10′ each and 1, 8′ × 12′. Walls are built of stone-in-mud and plastered and white washed. There is a 6′ verandah in front. There is a passage dividing the rooms on each side and 2 rooms are set apart for office and store. The roofing is of second-class wood and Calicut tiles. Doors and windows are all of wood.	Depôt-keeper's residence and depôt store-room.	
	Do. ..	Gardener's and driver's quarters and cattle-shed.	Do. ..	884 7 5	Gardener's and driver's quarters consist of 3 rooms 8′ × 8′ each, built with stone-in-mud and with thatched roof. Cattle-shed consists of 3 rooms, 2 of 15′ × 12′ each and 1, 18′ × 12′, built of stone-in-mud with thatched roof and no doors.	....	
	Do. ..	Bungalow ..	Periyakulam ..	1,084 0 0	This consists of one room 20′ × 14′ and 2 store-rooms 12′ × 12′ each with a verandah 7′ wide on 3 sides. The walls are built with brick-in-chunam and the roofing is of 1st-class vengai wood and partly terraced and partly tiled. Doors and windows are all of wood, the latter having iron bars. Walls are plastered and whitewashed.	Used by the District Forest-officer and Range officers when on inspection.	
	No. II range, Kodaikánal.	Forester's quarters.	Balasamudram ..	500 0 0	Similar to Forester's quarters at Gúdalúr	....	
			Fencing ..	41 9 6			
	Do. ..	Rest-house ..	Kookal ..	70 0 0	This consists of only one room 14′ × 14′ with a 5′ verandah all round. The walls are of wattle and date and the roof is thatched.	Used by Range officers when on inspection.	
	Do. ..	Do. ..	Poombarai ..	80 0 0			
	No. III, range, Tandigudi.	Do. ..	Mulaiyur ..	70 0 0	This also consists of only one room, but it is 16′ square with a 5′ verandah all round. The walls are of mud and whitewashed and the roofing is thatched.	Used by Range officers and by the District Forest-officer, and occasionally by officers of other departments.	

No. II range.	Pambar Forest station.	Pambar ..	721	0	0	It consists of 5 rooms, 4 measuring 10′ × 12′ each and one 12′ × 8′ with a 5 verandah in front with an enclosed backyard, roofing being Calicut tiles. The walls are built of new bricks.	Forest subordinates.
Do. ..	Rest-house ..	Marian shola ..	720	0	0	It consists one room 12′ × 12′, one bath-room 12′ × 6′ and verandah on 3 sides with 6′ wide. The walls are built of rough stone-in-mud and with corrugated iron sheets.	....
Do. ..	Do. ..	Kavalapatti ..	116	1	11	This consists of a room 18′ square with mud walls with a 5′ verandah all round and has only a thatched roof.	....
No. III range, Tandigudi.	Do. ..	Tandigudi ..	1,615	0	0	Consists of 2 rooms 12′ × 12′ and one room 12′ ×.15′, 2 bath-rooms 12′ × 9′ each with 6′ verandah on 2 sides. There are also a kitchen and a store-room with 2 stables. All are built of mud and stone with first-class vengai timber and Calicut tiles and with doors and windows, half glass and half pannelled.	For the use of the District Forest-officer and officers of other departments.
Do. ..	Forester's quarters.	Do. ..	800	0	0	The building consists of 3 large rooms, one measuring 12′ × 10′ and 2 others 10 × 10′, one bath-room 10′ × 6′ and a store-room 6′ × 10′ with a verandah in front 6′ wide. There are also a kitchen 8′ × 10′ and one horse stable 8′ × 10′. The building is built of stone-in-mud with corrugated iron roofing.	Used by the Range officers as residence.
Do.	Forest station ..	Do. ..	880	0	0	In consists of 4 rooms 12′ × 10′ and one room 12′ × 8′ with a verandah 57′ × 5′ with a corrugated iron roof.	....
Do.	Rest-house ..	Davadanapatti ..	70	0	0	This consists of a room 15′ square and is in other respects similar to that at Kavalapatti.	Used by the Range officers on circuit.
Do.	Do. ..	Periyur ..	70	0	0	This consists of one room, but it is 16′ square with a 5′ verandah all round. The walls are of mud and white-washed and the roofing is thatched.	Do.
Do.	Do. ..	Virupatchi ..	40	0	0	This consists of one room 20′ × 12′ with mud walls and a 6′ verandah in front and one kitchen 12′ × 6′. The roof is thatched.	....
No. IV range, Palamedu.	Ranger's quarters and office.	Palamedu ..	1,124	13	6	Similar in description to the Range officer's quarters and office at Cumbum, except that junglewood is used for bressummers.	Range officer's quarters and office.
Do. ..	Rest-house ..	Sirumalai ..	224	0	0	It is 30′ × 28′ and consists of one main room 12′ × 12′ and a bath-room 12′ × 6′ and 6′ verandah on 3 sides. There is also a kitchen 10′ square. The building is of rough stone-in-mud with thatched roof.	....
Do.	Do. ..	Munur	1,528	0	0	The building consists of a wall 18′ × 12′, a side-room 12′ × 4′ and 2 bath-rooms 6′ × 11′ with a verandah in front, and at side end a passage in the rear between the baths. The rufing is of Calicut tiles.	....
Do.	Do. ..	Patnum ..	800	0	0	The building consists of one centre room 12′ × 12′ and one bath-room 12′ × 6′ with a verandah in front and side. The walls are built of rough stone-in-mud with tiled roofing.	Used by the Range officers and the District Forest-officer on circuit.
Do.	Forest station ..	Munur	790	0	0	The building consists of one room 12′ × 10′ and another 12′ × 8′, both connected within by a doorway and 3 more rooms each 12′ × 10′ with a front verandah. The walls are built of mud. The roof is covered with tiles.	....
Do.	Ranger's quarters and office.	Kanavaipatty ..	1,129	10	8	Similar to the Range officer's quarters and office at Cumbum except that junglewood is used for bressummers, &c. It has also a kitchen.	....
Do.	Forest station ..	Do.	800	0	0	This building consists of 5 rooms, 3 rooms 12′ × 10′ each and one 12′ × 2′ and the other 12′ × 10′. It is built of mud walls with common tiles with a 6′ verandah.	....

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					SOUTHERN CIRCLE—*cont.*		
	Southern range.	Rest-house ..	Kalivelipil ..	Rs. A. P. 1,440 0 0	Building with plank roof consisting of 1 hall, 2 rooms and bath-rooms and verandah on 3 sides; length 39′ 6″, breadth 39′ 6″.	Rest-house	4,000 feet above sea-level.
	Do. ..	Out-house.	Do. ..	305 1 3	....	Out-house.	
	Do. ..	Rest-house ..	Kannikatu ..	1,850 0 0	Tiled building consisting of 2 rooms and bath-rooms, 1 hall and 2 verandahs; length 44′ 2″, breadth 31′ 2″.	Rest-house	2,550 feet.
	Do. ..	Coolie-shed ..	Do. ..	50 0 0	Thatched shed consisting of 2 compartments; length 23′ 3″, breadth 12′.	For coolies employed on works.	
	Do. ..	Forester's bungalow.	Do. ..	520 0 0	Building with plank roof consisting of 4 rooms and a front verandah; length 56′ 6″, breadth 23′ 9″.	For Ranger, foresters, guards and watchers.	
	Do. ..	Out-house and kitchen.	Do. ..	240 0 0	Thatched building consisting of 2 rooms and 2 stables; length 28′, breadth 9′ 9″.	Kitchen and stable.	
	Do. ..	Rest-house.	Oollar	75 0 0	Building with thatched roof consisting 2 rooms and a verandah all round; length 37′, breadth 27′.	Forester's rest-house	1,000 feet.
	Do. ..	Do. ..	Kariar (upper) ..	90 0 0	Thatched building consisting of 2 rooms and bath-rooms and 2 verandahs; length 31′, breadth 27′.	Rest-house.	700 feet.
	Do. ..	Do. ..	Do. (lower) ..	75 0 0	Building with thatched roof consisting of 2 rooms and a verandah all round; length 34′, breadth 24′.	For Forest guard and watchers.	
	Do. ..	Do. ..	Tharivattamparai	36 0 0	Thatched building consisting of 2 rooms; length 35′, breadth 26′.	Forest guard's rest-house.	
	Do. ..	Forest officer's bungalow.	Mundanthori ..	200 0 0	Tiled building, upper storied; length 41′ 6″, breadth 33′ 6″.	Rest-house.	
	Do. ..	Forester's rest-house.	Do. ..	Made from savings.	Round building consisting of 1 room and verandah all round. Circumfrence 103′ 6″, longest diameter 38′, short diameter 21′.	Forester's rest-house.	
	Do. ..	Hut	Do. ..	Do. ..	Thatched building consisting of 1 room, 1 kitchen and a verandah in front; length 21′, breadth 19′.	Forest guard's rest-house.	
	Do. ..	Do.	Do. ..	Do. ..	Thatched building consisting of 1 room, 1 verandah, kitchen, and 1 verandah in front; length 24′, breadth 19′.	Permit gumastah's house.	
	Do. ..	Bazaar	Do ..	Do. ..	Thatched building consisting of 2 rooms and a verandah in front; length 32′, breadth 30′.	Bazaar.	
	Do. ..	Hut	Do. ..	Do. ..	Thatched building consisting of 1 room and 1 verandah in front; length 15′, breadth 13′.	Dhonyman's hut.	
	Do. ..	Stable	Do. ..	Do. ..	Thatched building consisting of 2 compartments; length 26′, breadth 15½′.	Stable.	
	Do. ..	Kitchen ..	Do. ..	..	Thatched building consisting of 2 rooms; length 37′, breadth 15′.	Kitchen.	
	Do. ..	Closet	Do. ..	Made from savings.	Without roof; length 10′, breadth 6¾′.	Closet.	
	Do. ..	Depôt	Vikramasingapuram.	35 0 0	Thatched building consisting of 2 rooms and 1 front verandah; length 21′ 8″, breadth 16′ 3″.	Timber depôt.	
Tinnevelly.	Do. ..	Sub-Assistant Conservator's bungalow.	Ambasamudram	Not known.	Tiled building consisting of 8 rooms and 1 hall; length 58′, breadth 31′.	Rest-house	Transferred from Police department.

	Do. ..	Sub-Assistant Conservator's office.	Do. ..	284	0	0	Tiled building consisting of 1 room; length 24′, breadth 18′.	Office.
	Do. ..	Rest-house ..	Sengalteri ..	275	0	0	Thatched building consisting of 1 hall, 1 bath-room and verandah on 4 sides; length 27′, breadth 27′.	Rest-house.
	Do. ..	Forester's office.	Kalacad ..	315	0	0	Tiled building consisting of 2 halls, 1 record-room, 1 bath-room, 1 front verandah and a small back verandah; length 34′, breadth 24′.	Ranger's office.
	Do. ..	Mothalaruppan .	Mothalaruppan .	Under 200	0	0	Thatched building consisting of 2 rooms and 1 bath-room; length 25′ 6″, breadth 21′ 3″.	Rest-house.
Northern range.		Rest-house ..	Virusadikidai ..	200	0	0	Thatched building consisting of 1 hall, 1 bath-room and verandahs on all 4 sides; length 20′, breadth 20′.	Do.
	Do. ..	Out-house ..	Do. ..	56	0	0	Thatched building consisting of 2 rooms; length of each 12′ breadth of each 8′.	Kitchen.
Central range.		Rest-house and office.	Vasudevanallur .	500	0	0	Tiled building consisting of 1 hall, 1 verandah room, 2 corner rooms and verandahs on 3 sides; length 31′, breadth 29′.	Rest-house.
	Do. ..	Depôt	Do. ..	89	12	6	....	Depôt.
	Do. ..	Out-house ..	Do. ..	..			Thatched building consisting of 2 rooms, 1 bath-room and verandahs on 2 sides; length 23′, breadth 18′.	Office.
	Do. ..	Rest-house ..	Kotantheri ..	375	0	0	Thatched building consisting of 1 room, 1 bath-room and verandahs on 2 sides; length 27½′, breadth 27½′	Rest-house.
	Do. ..	Do. ..	Thalayanai ..	Under 200	0	0	Thatched building consisting of 1 room, 1 bath-room and verandahs on 2 sides; length 33′, breadth 21′.	Do.
	Do. ..	Do. ..	Kannimarkoil, Puliyangudi hills.	200	0	0	Thatched building consisting of 1 room, 1 bath-room and verandahs on 2 sides; length 23′, breadth 22′.	Do.
	Do. ..	Do. ..	Parliyar Kadayanallur hills.	200	0	0	Thatched building consisting of 1 room, 1 bath-room and verandahs on 2 sides; length 29′, breadth 26′.	Do.
	Do. ..	Do. ..	Courtallum ..	737	11	0	Tiled building consisting of 3 rooms and 2 bath-rooms; length 38½, breadth 28½.	Do.
	Do. ..	Kitchen ..	Do. ..	51	0	0	Tiled building consisting of 3 rooms; length 40′, breadth 11′.	Kitchen.
	Do. ..	Stable	Do.	49	8	8	....	Stable.
	Do. ..	Out-house ..	Do. ..	348	0	0	Tiled building consisting of 6 rooms; length 36′, breadth 20½′.	Office and godown.
	Do. ..	Rest-house ..	Kadayanallur ..	750	0	0	....	Out-house.
	Do. ..	Ont house and godown of the Ranger's office.	Courtallam ..	348	0	0	Tiled building consisting of 6 rooms; length 36′ 3″, breadth 25′ 6″.	Partly as office and partly as residence of the Forester.
	Do. ..	Tannah hut ..	Peranur ..	200	0	0	Tiled building of a single room and verandah; length 12′, breadth 12′.	Tannah to check the removals from Travancore.
	Do. ..	Do. ..	Thatchankudi-yeruppu.	200	0	1	Tiled building of a single room and verandah; length 12′, breadth 12′.	Do.
	Do. ..	Ranger's office ..	Kadyanallur ..	750	0	0	Tiled building consisting of 5 rooms and verandahs on 2 sides; length 42′, breadth 30′.	Ranger's office and rest-house.
Southern range.		Out-house . ..	Ollar	169	10	6	Thatched building consisting of 4 rooms; length 41′, breadth 12′.	Kitchen and stable.
	Do. ..	Bungalow ..	Sivasylum ..	890	14	6	Tiled building consisting of 3 rooms and verandahs on 3 sides; length 43′, breadth 34′.	Rest-house.
	Do. ..	Do. ..	Mundanthorai ..	2,224	3	1	Tiled building, storied, consisting of 3 rooms and verandah on 3 sides; length 41′, breadth 33′ 9″.	Do.
	Do. ..	Out-house ..	Kalirilapil ..	305	1	3	....	Out-house.
	Do. ..	Tannah hut ..	Kolunthumamalai.	65	9	4	Thatched building of a single room; length 12′, breadth 12′.	Rest-house of the Forest guard.

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					SOUTHERN CIRCLE—*cont.*		
				Rs. A. P.			
Tinnevelly *cont.*—	Northern range.	Bungalow ..	Athithimodu ..	434 8 7	....	..	
	Do. ..	Tannah ..	Do. ..	151 13 4	....	..	
	Nanguneri sub-range.	Kitchen to the rest-house.	Sengalteri ..	20 8 0	Thatched building, 1 room.	..	
	Do. ..	Bungalow ..	Nadukani ..	200 8 6	Thatched building, 1 room and verandah; length 27′, breadth 27′.	Rest-house.	
	Do. ..	Out-house ..	Asamboo hills ..	200 2 0	Thatched building; length 14′, breadth 8′.	Out-house.	
	Tenkarai sub-range.	Bungalow ..	Nazereth ..	1,000 0 0	Tiled building of 3 rooms and verandahs on 3 sides; length 43′, breadth 12′.	Rest-house.	
	Do. ..	Do. ..	Do. ..	200 0 0	Tiled building of 1 room; length 12′ × 12′, breadth.	Forest guards' quarters.	
	Do. ..	Do. ..	Vallanad ..	875 0 0	Tiled building of 3 rooms and verandahs on 3 sides; length 43′, breadth 12′.	Rest-house of the Forester.	
	Do. ..	Do. ..	Do. ..	200 0 0	Tiled building of 1 room; length 12′, breadth 12′.	Forest guards' quarters.	
	Satyamangalam.	Inspecting officer's residence.	Talamalai ..	250 0 0	30′ × 12′ with mud walls and tiled roof	Used by Inspecting officers.	
	Do. ..	Do. ..	Ekkatur ..	250 0 0	32′ × 15′ do. do.	Do.	
	Do. ..	Residence of Forester.	Talavadi ..	250 0 0	16′ × 8′ do. do.	As Forester's residence.	
	Do. ..	Inspecting officer's residence.	Hassanur ..	350 0 0	40′ × 12½′ do. do.	By Inspecting officers ..	Transferred from Local Fund Department.
	Do. ..	Do. ..	Markampolliem	670 0 0	44′ × 16′ do. do.	Do.	
	Do. ..	Do. ..	Karalia ..	670 0 0			
	Do. ..	Do. ..	Gairmallam ..	800 0 0			
	Do. ..	Do. ..	Geddasal ..	....	....	....	Transferred from Local Fund Department.
North Coimbatore.	Kollegál ..	(*a*) Residence and (*b*) Range office.	Kollegal ..	890 0 0	(*a*) 51′ × 13′ (*b*) 22′ × 12′ with brick walls and tiled roof ..	For the use of the Range officer and his office.	Erected by the department.
	Do. ..	Inspecting officer's residence.	Kowdally ..	250 0 0	32½′ × 16½′ with mud walls and tiled roof ..	By Inspecting officers.	
	Do. ..	Do. ..	Bylur	400 0 0	do. do.	Do. ..	Transferred from Local Fund Department.
	Do. ..	Do. ..	Lokanahally ..	....	do. do.	Do.	
	Do. ..	Do. ..	Ponnachi ..	310 0 0	41′ × 15′ do. do.	Do.	
	Do. ..	Do. ..	Alambady ..	310 0 0		Do.	
	Do. ..	Do. ..	Hannur ..	300 0 0	do. do.	Do. ..	Do.
	Do. ..	Do. ..	Thalabettah ..	570 0 0		Do.	
	Do. ..	Do. ..	Gopinatham ..	570 0 0		Do.	
	Do. ..	Do. ..	Changadi ..	250 0 0		Do.	
	Bhavani ..	Ranger's quarters and storeroom.	Bhavani ..	1,000 0 0	3½′ × 16½′ do. do. .. .. .. 41′ × 15′ with mud walls and tiled roof	Do. As residence of the Ranger.	
	Do. ..	Do. ..	Tamarakkarai ..	350 0 0	Do. do. do. ..	By Inspecting officers.	

South Coimbatore.	No. I, Tunacadavu Range.	District Forest-officer's quarters.	Mount Stuart ..	2,500	0	0	Iron roof, consists of 3 rooms of $14\frac{3}{4}' \times 11\frac{3}{4}'$, $14\frac{3}{4}' \times 14\frac{3}{4}'$ and $14\frac{3}{4}' \times 11\frac{3}{4}'$, respectively, 2 bath-rooms and 2 store-rooms with verandah on two sides.	District Forest-officer's rest-house.		
	Do. ..	Godowns ..	....	350	0	0	Tiled, consists of 4 rooms of $8\frac{1}{4}' \times 7\frac{3}{4}'$, $8\frac{1}{4}' \times 8'$, $8\frac{1}{4}' \times 7\frac{3}{4}'$ and $8\frac{1}{4}' \times 7\frac{3}{4}'$ respectively.	....		
	Do. ..	Stables ..	....	150	0	0	Tiled, consists of 3 rooms of $12' \times 8'$, $12' \times 7\frac{3}{4}'$ and $12' \times 7\frac{1}{2}'$ respectively.	....		
	Do. ..	Sub-Assistant's bungalow.	....	3,250	0	0	Iron roof, consists of 2 rooms of $20' \times 12\frac{1}{2}'$ and $20\frac{1}{4}' \times 12\frac{1}{2}'$, 2 bath-rooms of $10\frac{1}{2}' \times 6\frac{3}{4}'$ and $11\frac{1}{2}' \times 6\frac{3}{4}'$ and store-room of $11\frac{1}{2}' \times 6\frac{3}{4}'$.	Range officer's office and quarters.		
	Do. ..	Ranger's quarters.	....	600	0	0	Tiled roof, consists of 4 rooms of $11\frac{1}{2}' \times 8\frac{1}{2}'$, $11\frac{1}{2}' \times 8\frac{1}{2}'$, $9\frac{1}{4}' \times 8\frac{1}{2}'$ and $9\frac{1}{4}' \times 8\frac{1}{2}'$ respectively.	Old Ranger office quarters now occupied by a Forester.		
	Do. ..	Out-house ..	....	75	0	0	Tiled roof, $8' \times 8'$	....		
	Do. ..	Writer's and peon's quarters.	....	700	0	0	Iron roof, consists of 4 rooms of $16\frac{1}{2}' \times 10'$, $16\frac{1}{2}' \times 9\frac{1}{2}'$, $16\frac{1}{2}' \times 9\frac{1}{2}'$ and $16\frac{1}{2}' \times 9\frac{1}{2}'$ respectively.	Writer's and peon's residence.		
	Do. ..	Store-shed ..	....	300	0	0	Iron roof, consists of 2 rooms of $12' \times 12'$ each	For tramway materials.		
	Do. ..	Forester's quarters.	Mount Stuart ..	366	0	0	Tiled roof, consists of 2 rooms of $15\frac{3}{4}' \times 12\frac{3}{4}'$, $12\frac{3}{4}' \times 12\frac{3}{4}'$ and 1 bath-room $8\frac{1}{2}' \times 7\frac{1}{4}'$ with verandah on one side.	Vacant.		
	Do. ...	Forester's and guard's quarters.	Anaipadi ..	200	0	0	Thatched sheds, consists of 15 rooms of $10' \times 10'$ each	Foresters' and guards' residence.		
	Do. ..	Store-shed ..	Do. ..	208	0	0	Wooden sides with corrugated iron sheet roofing $6' \times 14'$.	For elephant, things, &c.		
	Do. ..	Ranger's quarters.	Sethumadai ..	950	0	0	Tiled with Mangalore tiles, consists of 3 rooms of $12\frac{3}{4}' \times 11\frac{3}{4}'$, $12\frac{3}{4}' \times 12\frac{3}{4}'$ and $12\frac{3}{4}' \times 11\frac{3}{4}'$, 2 bath-rooms and verandah on two sides.	Range officer's office and residence.		
	Do. ..	Clerk's and peon's quarters.	Do. ..	500	0	0	Tiled, consists of 3 rooms with compartments of $9' \times 9'$ and $6' \times 9'$ in each room.	Clerk's and peon's residence.		
	No. II, Pollachi Range.	District Forest-officer's bungalow.	....	2,300	0	0	Consists of 3 rooms $15' \times 12'$, $15' \times 15'$ and $15' \times 12'$, respectively, and 1 bath-room, 1 store-room with verandah on 2 sides. There are also 1 line with 3 stables and 1 line of 2 kitchens and 2 godowns.	Used by the District Forest-officer as a rest-house and by officers of other departments.	Tiled.	
	No. II, Pollachi.	Ranger's quarters.	Sethumadai ..	850	0	0	Consists of an office hall $27 \times 12\frac{3}{4}'$ and 2 store-rooms of $8' \times 6'$ each and a verandah attached to the office and 3 rooms consisting of $10' \times 8'$, $11' \times 10'$ and $10' \times 8'$, and 2 side rooms (a bath and a store room) $8' \times 6'$ and $10' \times 6'$, respectively, and a kitchen-room outside.	Range officer's office and residence.	Do.	
	Do. ..	Forester's quarters.	Do. ..	500	0	0	Consists of 2 rooms $9\frac{1}{2}' \times 9'$ and $9' \times 8\frac{1}{2}'$ and a bath-room and a verandah in front and an out-house (kitchen).	Used by the Tanadar and Forest guard.	Do.	
	No. II, Pollachi Range.	Writer's quarters.	Do. ..	200	0	0	Consists of 2 rooms $10\frac{1}{2}' \times 9\frac{1}{2}'$ and $8' \times 9\frac{1}{2}'$	Writer's residence	Do.	
	Do. ..	Anamalais bungalow.	Anamalais ..	850	0	0	The main building consists of 2 rooms $15\frac{1}{2}' \times 15\frac{1}{2}'$ and $14' \times 12'$ close together, with a bath-room and a separate room $15' \times 15'$, with a thatched court-yard $32' \times 31'$ connecting this with the main building and a thatched verandah all round. There is a thatched kitchen consisting of 2 rooms.	Used as a rest-house occasionally. The compound forms a timber depôt.	Do.	
	Do. ..	Pollâchi depôt building.	Pollâchi ..	1,000	0	0	Consists of a small room $13\frac{1}{4}' \times 8'$ and a verandah all round inside, and with also a verandah all round outside. The building is $48\frac{3}{4}' \times 48\frac{3}{4}'$; a tiled out-house used as a latrine is also attached.	Used as a rest-house occasionally.	Do. The compound forms a timber depôt.	
	Do. ..	Vellooni rest-house.	Vellooni ..	350	0	0	A tiled building consists of 2 rooms $12' \times 12'$ and $12' \times 7'$ with an open thatched verandah in front.	Used as a rest-house by a Forester.	Tiled.	

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

SOUTHERN CIRCLE—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
				RS. A. P.			
South Coimbatore —*cont.*	No. IV, Udamalpet Range.	Ranger's quarters.	Esalamanthorai.	950 0 0	Consists of 4 tiled rooms of 9′ × 9′ × 8′; 1 hall (terraced) of 18¾′ × 9′ × 7′ and a kitchen of 9′ × 9′ × 7′. There is also a well in the compound; tiled verandah round the main building.	Range officer's office and residence.	Tiled.
	No. VI, Méttupálaiyam Range.	Do. ..	Méttupálaiyam..	1,250 0 0	Consists of 3 rooms of 16′ × 16′, 16′ × 10′ and 16′ × 10′, 2 bath rooms, 1 store-room and a record-room with verandahs on three sides; there are also kitchen and stable.	Do. do. ..	Do.
	Do. ..	Tannah hut ..	....	74 13 4	Consists of only 1 room of 12′ × 12′ with a verandah 4′ broad.	Tanadar's residence.	
	Do. ..	Do. ..	Karamadai ..	..	Do. do. do. ..	Do.	
	Do. ..	Inspection hut, thatched.	Nirali in Sundaputti reserve.	86 0 0	Consists of 2 rooms 8′ × 8′ each and one front verandah ..	Temporary residence for Inspecting officers.	
	Do. ..	Do. ..	Kandyur ..	40 0 0	Consists of only 1 room of 16′ × 8′ with a front verandah ..	Do. do.	
	No. VII, Bolamputty Range.	District Forest-officer's bungalow.	Iruttupallam ..	2,000 0 0	A pucka-built bungalow; consists of 3 rooms of 12′ × 10′, 12′ × 10′ and 25½′ × 10′, respectively, 2 bath-rooms with verandah on three sides; there are also kitchen, stables and godowns.	Rest-house for District Forest-officer and used by officers of other departments.	
	Do. ..	Ranger's quarters and office.	Do. ..	750 0 0	One pucka-built house covered with Basel Mission tiles; containing 1 side room 12′ × 11′ with bath-room 11′ × 4¾′, 1 middle room 12′ × 12′ with (rear verandah 12′ × 6′, 1 side room 12′ × 11′ with bath room 11′ × 4¾′, 1 front verandah 40′ × 16).	By Range officer for dwelling and as Range Officer's office and store-room.	
	Do. ..	Two guards' houses.	Do. ..	235 12 7	Built of burnt bricks and teakwood under Calicut tiles; consists of 2 large rooms, 2 small ones for kitchen. The dimensions are 2 rooms 10′ × 8′ and 2 small ones 5′ × 5′; each guard is allowed one large and one small room.	Quarters for two Forest guards	
	Do. ..	Range officer's rest-house and a guard's quarters.	Vellapathi ..	379 11 3	Built of burnt bricks and teak wood under Calicut tiles; consists of 1 room 12′ × 10′ with a bath-room 5′ × 6′, verandah in front 23′ × 6′, 1 room 10′ × 8′.	Rest-house for Inspecting officers and quarters for one guard.	
	No. VIII, Sholukarai Range.	Ranger's quarters.	Navakarai ..	300 0 0	Consists of 5 rooms and a verandah measuring 9′ × 6′, 9′ × 9′, 9′ × 9′, 19¼′ × 7¼′, 19½′ × 8′ and 9′ × 7¼′, respectively.	Range officer's residence.	
	Do. ..	Office	Do. ..	267 7 6	Consists of 1 room and a verandah 20′ × 9¼′ and 20′ × 7¼′, respectively.	Range office.	
	Do. ..	Two guards' quarters.	Do. ..	300 0 0	Each containing 2 rooms and a verandah 9¾′ × 9¼′, 9′ × 9¼′ and 20½′ × 3½′, respectively.	Residence of two Guards.	
	Do. ..	Residence ..	Do. ..	54 8 0	Consists of 1 room and a verandah 13¼′ × 9½′ and 14′ × 2½′, respectively.	Residence of Tapal peon.	
	Do. ..	Tannah ..	Do. ..	..	Consists of 1 room 12′ × 9′	Tannah station.	
	Coimbatore depôt.	Office	Coimbatore ..	350 0 0	Consists of 2 rooms 20½′ × 13′ × 9½′ and 13′ × 13′ × 9½′, respectively, and verandahs on all four sides.	Depôt-keeper's office.	
	Mudumalai	Inspection-house.	Benné	713 0 0	A building of the Gódávari standard plan on 3′ piles constructed of wood with thatched roof.	Used as a residence of the Inspecting officer.	
	Do. ..	Do. ..	Mudumalai ..	844 0 0	Do. do. do. ..	Do. do.	

	Do. ..	Range-house ..	Benné	580	0	0	A building of the Gódávari standard plan on 3′ piles constructed of wood with slight modifications.		Occupied by the Ranger.
	Do. ..	Ranger's hut ..	Mudumalai ..	400	0	0	A thatched hut with bamboo tattee walls plastered with mud.		Used as a residence of the Ranger when on tour.
	Do. ..	Do. ..	Tippakadu ..	40	0	0	Do. do. do. ..		Do. do.
	Do. ..	Forester's hut ..	Benné	40	0	0	Do. do. do. ..		Occupied by the Forester.
	Do. ..	Clerk's hut ..	Do.	48	0	0	Do. do. do. ..		Occupied by the clerk.
	Do. ..	Guard's hut ..	Do.	20	0	0	Do. do. do. ..		Occupied by the guard.
	Do. ..	Do. ..	Mudumalai ..	20	0	0	Do. do. do. ..		Do.
	Do. ..	Do. ..	Tippakadu ..	30	0	0	Do. do. do. ..		Do.
	Sigur range.	Range office ..	Masnigudi ..	312	0	0	An old building of brick and mortar roof and walls bought and repaired.		Used as an office by the Range officer.
	Do. ..	Range hut ..	Kalhatti ..	220	0	0	Thatched hut with mud walls		Occupied by the Range officer.
	Ootacamund.	Ranger's halting shed.	Bikapathy ..	53	0	0	Thatched hut with tattee walls plastered with mud ..		Used as a residence of the Ranger when on tour.
	Do. ..	Depôt hut ..	Ootacamund ..	100	0	0	Tiled roof, walls plastered with mud		Occupied by the watcher.
	Do. ..	Guard's hut ..	Bikapathy ..	75	0	0	Thatched hut with tattee walls plastered with mud ..		Occupied by the guards of the respective beats.
	Do. ..	Do. ..	Avalanche ..	60	0	0	Do. do. do.		Do. do.
	Do. ..	Do. ..	Dodabetta ..	110	0	0	Do. do. do. ..		Do. do.
	Do. ..	Do. ..	Cairn hill ..	110	0	0	Do. do. do. ..		Do. do.
	Do. ..	Do. ..	Aramby ..	110	0	0	Do. do. do. ..		Do. do.
	Do. ..	Do. ..	Governor's shola.	110	0	0	Do. do. do. ..		Do. do.
Nílgiris.	Do. ..	Do. ..	Bikkatti ..	90	0	0	Do. do. do. ..		Do. do.
	Do. ..	Gardener's hut.	Lovedale ..	53	0	0	Do. do. do. ..		Occupied by the gardener.
	Coonoor range.	Inspection and rest-house.	Ralliah	360	0	0	A wooden house with tiled roof including stables		Used as a residence by the officers of the Forest Department when on tour.
	Do. ..	Do. ..	Kullar	1,807	0	0	A wooden house with zinc roof including stables and outhouses.		Do. do.
	Do. ..	Seed-house ..	Sim's Park ..	265	0	0	A wooden house with thatched roof		Used as a place for storing seeds.
	Do. ..	Range hut ..	Kótagiri ..	220	0	0	A hut with tiled roof and mud walls		Occupied by the Forester.
	Do. ..	Do. ..	Kartary ..	200	0	0	Do. do.		Do.
	Do. ..	Guard's hut ..	Ralliah	83	0	0	Thatched huts with mud walls		Occupied by the guards of the respective beats.
	Do. ..	Do. ..	Brooklands ..	80	0	0	Do.		Do. do.
	Do. ..	Do. ..	Bandy shola ..	83	0	0	Do.		Do. do.
	Do. ..	Do. ..	Dena	80	0	0	Do.		Do. do.
	Do. ..	Do. ..	Kodanád ..	80	0	0	Do.		Do. do.
	Do. ..	Do. ..	Hulikal	90	0	0	Do.		Do. do.
	Do. ..	Do. ..	Kolakombé ..	90	0	0	Do.		Do. do.
	Do. ..	Do. ..	Deva shola ..	80	0	0	Do.		Do. do.
	Do. ..	Do. ..	Melúr	90	0	0	Do.		Occupied by the guard.
	Do. ..	Gardener's hut.	Sim's Park ..	80	0	0	Do.		Occupied by the gardener.
	Do. ..	Store-room ..	Ralliah	40	0	0	Do.		Used for storing charcoal.
	Do. ..	Depôt hut ..	Coonoor ..	559	0	0	A pucka brick building with zinc roof		Used as an office by the depôt-keeper and as residence of the watcher, and also as store-room for the Ranger.
	Do. ..	Gardener's hut.	Benhope ..	23	0	0	Thatched roof with mud walls		Occupied by the gardener.

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					SOUTHERN CIRCLE—*cont.*		
				Rs. A. P.			
Nilgiris —*cont.*	Ootacamund Range.	Forester's house.	Naduvattam ..	779 0 0	A brick building with corrugated iron roofing. This consists of 3 rooms (2 rooms 14′ × 12′ each) and (1 room 6′ × 12′), with 4 doors (2 doors 6′ × 4′ each) and (2 doors 5 × 2½′ each), three windows 3′ × 4′ each—Rs. 540. Outhouses to doors consisting of 2 rooms 10′ × 10′ each with 2 doors 4′ × 6′ each, 2 windows 2′ × 3′ each—Rs. 239.	Used by the Forester.	
	Do. ..	Depôt clerk's office room.	Ootacamund ..	172 12 11	A brick building with tiled roof	Used as an office room by the Depôt clerk.	
	Do. ..	Ranger's halting shed.	Muttanad ..	172 0 0	Thatched hut with mud walls. This consists of 2 rooms (12′ × 10′ each), 3 doors (6′ × 2½′ each), 2 windows (2′ × 1½′ each).	Used as a residence of the Ranger when on tour.	
	Do. ..	Guard's hut ..	Neduvattam ..	159 0 0	Tiled roof walls plastered with mud. This consists of 2 rooms (12′ × 10′), (10′ × 6′), with 2 doors (5′ × 2½′ each), 2 windows (2′ × 1½′ each).	Used as a residence by the Guard.	
	Do. ..	Do. ..	Pykara	140 0 0	Thatched hut with mud walls. This consists of 2 rooms (12′ × 10′), (10′ × 6′), with 2 doors (5′ × 2½′ each), 2 windows (2′ × 1½′ each).	Do. do.	
	Do. ..	Do. ..	Bikkatu ..	116 0 0	Do. do.	Do. do.	
	Do. ..	Do. ..	Chinna Coonoor.	87 0 0	Do. do.	Do. do.	
	Manantoddy	Residence ..	Manantoddy ..	12,377 0 0	Built of burnt-bricks and teak-wood, partly iron-roofed under Mangalore tiles. Consists of 11 rooms and a verandah in front 50′ 5″ wide and a portico. Rooms are of the following dimensions:—19′ 7″ × 9′; 16′ 4″ × 18′ 10″; 16′ 4″ × 7′ 11″; 18′ 10″ × 15′ 10″; 15′ 10″ × 7′ 11″; 7′ 11″ × 7′ 11″; 15′ 11″ × 17′ 11″; 16′ 5″ × 7′ 10″; 16′ 11″ × 8′; 16′ × 8′; 7′ 10″ × 7′ 10″.	Residence for District Forest-officer.	District Forest-officer pays a rent of Rs. 40 per mensem.
	Do. ..	Stables and godown.	Do. ..	1,039 0 0	Built of burnt-bricks and teak-wood and tiled; has 6 divisions, one of 16′ 3″ × 10′ 2″ and 5 rooms of 10′ × 8′ 2″ each.	Used for horses and bullocks; and as residence of servants.	
	Do. ..	Cook-room ..	Do. ..	604 0 0	Built of burnt-bricks and teak-wood and tiled; has 4 rooms and a verandah in front 5′ 10″. The rooms are 15′ × 12′; 12′ × 12′; 15′ 4″ × 4′ and 12′ × 4′.	Used as cook-room and store.	
	Do. ..	Old office ..	Do. ..	669 0 0	There are 3 rooms of 22′ × 11′ 9″; 25′ × 16′ 10″; 9′ 10″ × 6′ 10″ with verandah on 3 sides 8′ wide.	Used as record-rooms.	
	Do. ..	New office ..	Do. ..	651 0 0	Has 2 rooms of 20′ × 13′ and 12′ × 13′ with 8′ verandah in front and back.	Used as office.	
	Do. ..	Gardner's house.	Do. ..	42 0 0	Has a room 16′ 3″ × 10′ 2″	Residence of gardener of the Manantoddy Experimental Farm.	
	Do. ..	Seed-house ..	Do. ..	264 0 0	Built of teak-wood and burnt-bricks with glazed roof of 15′ 2″ × 10′ 8″ in dimension.	For raising plants.	

North Malabar.	Begur ..	Rest-house ..	Begur	1,143	0	0	Walled with teak planks and tiled, consists of two rooms of 16′ 2″ × 12′ and 11′ 8″ × 12′ and 4′ verandah in front.	Residence and office for the Range officer.	Was built by Mr. Peet in 1874 or 1875 at a cost of Rs. 1,000. It was a shingled one. It has been tiled at a cost of Rs. 142-13-1.
	Do. ..	Residence ..	Do. ..	574	0	0	Consists of 2 rooms 10′ × 10′ and a verandah all round 3′ wide.	Rest-house of the District Forest-officer.	
	Do. ..	Elephant shed ..	Do. ..	602	0	0	It is of 58′ × 19′	Stabling elephants as well as residence for mahout.	
	Do. ..	Mahout lines ..	Do. ..	561	0	0	Four rooms, each being 12′ × 9′		
	Do. ..	Store	Do. ..	375	0	0	Has one room 20′ × 12′ and another by 12′ × 12′ and verandah in front 3′ wide.	Storing provisions for elephants.	
	Brammagiri.	Rest-house ..	Brammagiri ..	1,026	0	0	Forest lodge built of rock and clay and roofed with iron; has 3 rooms, 14′ 3″ × 14′ 2″, 14′ 3″ × 14′ 2″ and 10½′ × 7′ with 4′ verandah in front.	Rest-house for District Forest-officer and Range officers for inspection.	
	Do. ..	Kitchen ..	Do. ..	197	0	0	Iron-roofed and built of stone, bricks, &c., of 18′ 4″ × 11′ with a verandah 4′ 8″ in front.	Used as kitchen.	
	Tirunelly ..	Forest guard's station.	Tirunelly ..	376	0	0	Built of mud with teak roof and tiled; has a room 17½′ × 9½′ with 5′ verandah all round.	Residence for Forest guard.	
	Kakkery ..	Do. ..	Kakkery ..	242	0	0	Has a room 12′ × 12′ with verandah in front of 4′ wide; has the roof tiled.	Do. do.	
	Kaikaty ..	Do. ..	Kaikaty ..	230	0	0	Do. do. do. ..	Do. do.	
	Kartikolum.	Do. ..	Kartikolum ..	230	0	0	Do. do. do. ..	Do. do.	
	Kuppadi ..	Residence and office.	Kuppadi ..	2,319	0	0	Built of sun-dried bricks and iron-roofed; has 8 rooms, 2 of them being 14′ 6″ square, the other 2 being 14′ 3″ × 6′ 9″ and the remaining 4 being 6′ 9″ square each.	Residence and office for Range officer.	
	Dindimal ..	Do. ..	Dindimal ..	1,080	0	0	A bungalow with kitchen, &c., stable, built of burnt-bricks and of different kinds of wood and tiled; has 11 rooms of 8¾′ × 8½′, 21′ × 8½′ (feet), 16¼′ × 8½′, 16½′ × 8½′, 8½′ × 8½′, 13′ × 18¾′, 16¾′ × 18¾′, 16¾′ × 16¾′, 16½′ × 27¼′, 13¼′ × 8½′, 8½′ × 8½′ in dimensions with 2 verandahs 34′ × 16¼′, 8½′ × 18¾′ and a porch 17′ × 21′ in front.	Rest-house for the District Forest-officer and Range officer.	
	Mukkie ..	Do. ..	Mukkie ..	488	0	0	Wooden serambi, tiled; has 2 rooms 10′ square with a 3′ verandah all round.	Residence and office for Range officer.	Purchased from Messrs. Alston and Co.
	Kanot ..	Do. ..	Kanot ..	416	0	0	Wooden serambi, tiled; bottom closed with sun-dried bricks; has 2 rooms of 10′ square each and a 4′ verandah all round.	Do. do.	
	Chedlet ..	Rest-house ..	Chedlet ..	548	4	7	Wooden double serambi, tiled; has 5 rooms 4 rooms of 10′ × 10′ square each and 1 room 10′ × 4′ and a verandah 4′ all round on the upper floor.	Rest-house for District Forest-officer and Range officer for inspection.	
	Do. ..	Do. ..	Muthunga ..	* 557	5	9	Wooden double serambi, tiled; has 5 rooms 4 rooms of 10′ × 10′ square each and 1 room 10′ × 4′ and a verandah 10′ wide in front and 4′ on all other sides.	Do. do. ..	* Original sanction Rs. 530. Supplemental sanction accorded for Rs. 40—*vide* Board's Proceedings, Mis. No. 612, dated 26th May 1893.
	Nilambur ..	Inspection shed.	Panangod ..	190	0	0	Wooden serambi with tiled roofing; has a big room ..	Used as inspection shed by the District Forest-officer, Range officer and Foresters.	
	Do. ..	Do. ..	Amarampalam ..	100	0	0	Wooden serambi with thatched roof; and has a room ..	Do. do.	
South Malabar.	Do. ..	Office and residence.	Nilambur ..	5,000	0	0	A tiled bungalow built of laterite stone; has 6 rooms ..	Ranger's quarters and Range office.	
	Do. ..	Office ..	Do. ..	2,000	0	0	Tiled house built of laterite stone; has 2 rooms	Used as South Malabar District Forest-office.	
	Do. ..	Residence ..	Nilambur hill ..	13,469	0	0	One storied tiled bungalow with out-houses built of laterite stone; consists of 4 rooms, a store and a pantry.	District Forest-officer's quarters.	
	Do. ..	Office and rest-house.	Kallai ..	541	0	0	Serambi with tiled roofing built of timber and has 2 rooms.	Used as depot office and rest-house for subordinates.	
	Coondapoor.	Old Munsif's Court.	..	2,100	0	0	A rectangular building 55′ × 38′ with 4 rooms built of stones with a tiled roof.	Range office	
	Do. ..	Forest hut ..	Saltadi reserve	111	0	0	A rectangular building 34′ × 18′ × 10′ high, with 2 rooms, one large and 1 small, with verandah on 2 sides and one door and two windows to each, built of mud with a thatched roof.	One room permanently by the watcher to live in and to keep Government implements, and another room by Ranger at time of inspection.	Transferred from the Public Works Department—*vide* G.O., dated 9th August 1892, No. 2200 W. The building requires certain repairs.
South Canara	Do. ..	Tannah	Wandse ..	66	0	0	Is of oblong shape, the longer side being 28′ × 15′ broad. Has 2 rooms, the larger one 13′ × 12½′ broad and the smaller one 7′ × 12½′. Has two verandahs 4′ broad on the northern and southern sides. Walls of mud and roof thatched.	Forest tannah.	

A detailed list of completed Forest buildings in the Madras Presidency with their approximate cost, &c.—*cont.*

District.	Name of range.	Name of building.	Situation.	Cost.	Description of building and accommodation available.	How used.	Remarks.
					SOUTHERN CIRCLE—*cont.*		
				RS. A. P.			
South Canara—*cont.*	Udipi ..	Forest hut ..	Pilarkan reserve.	75 0 0	The main building is 31′ long × 20′ broad; contains two rooms, one 17¾′ × 12′ and the other 12′ × 8¾′, with a verandah 5′ broad facing east. Each room has 2 doors and 2 windows. The walls are of mud and 8½′ high 1½′ thick. There is an additional room to the south-west 5½′ square with one door. The roof is a thatched one.	Forest Rest-house.	
	Do. ..	Tannah	Someshwar	..	The main building occupied a space of 33′ × 15′ and contained 2 rooms, one 17′ × 9′ and the other 9′ × 9′, and a small verandah in front of the building; the roof is a thatched one.	Forest tannah.	The building has come down as it was not repaired.
	Mangalore ..	Do.	Jeppu, Mangalore town.	75 0 0	Is a mud and tiled building 18′ × 13′ 3″ consisting of 1 room 8′ 7″ × 10′ 1½″ and one verandah 13′ 3″ × 5′ 4″.	Do.	
	Do. ..	Do.	Kankonadi, Mangalore town.	75 0 0	Is a mud and tiled building 19′ × 12′ 11″, consisting of 1 room 10′ 8″ × 7′ 5″ and 1 verandah 11′ 5″ × 5′ 11″.	Do.	
	Do. ..	Do.	Police hospital ..	75 0 0	Is a mud and tiled building 16′ × 13′ 8″, consisting of 1 room 7′ 9″ × 9′ 7″ and 1 verandah 6′ × 11′ 9″.	Do.	
	Do. ..	Do.	Bijai	75 0 0	Is a mud and tiled building 16′ 9″ × 13′ 5″, consisting of 1 room 7′ 9″ × 10′ 4″ and 1 verandah 6′ 2″ × 10′ 3″.	Do.	
	Do. ..	Do.	Kadiri	75 0 0	Is a mud and tiled building 16′ 3″ × 13′ 2″, consisting of 1 room 7′ 4″ × 10′ 1″ and verandah 6′ 4″ × 11′.	Do.	
	Do. ..	Do.	Urwa	75 0 0	Is a mud and tiled building 17′ 1″ ×13′ 1″, consisting of 1 room 8′ 1″ × 10′ 4″ and verandah 6′ 1″ × 10′ 6″.	Do.	
	Do. ..	Forest hut ..	Ullal plantation.	70 0 0	Is a wooden building 12′ × 8′, consisting of 2 rooms, of which one 8′ × 8′ and the other 8′ × 4′.	Residence of gardener.	
	Do. ..	Do. ..	Tannir Bhavi plantation.	70 0 0	Do. do. do	Do.	
	Uppinangadi.	Tannah.. ..	Jalsur	17 0 0	Built of mud with a thatched roof; is 21′ long, 15′ broad and 7′ high; contains 2 rooms each 12′ × 10′ with a verandah 27′ × 4′.	As tannah.	
	Do. ..	Do.	Uppinangadi ..	30 0 0	Is a mud and thatched building 28′ long, 15½′ broad and 7½′ high; contains 2 rooms, one 11′ × 11′ and the other 18′ × 4½′, with 2 verandahs, one 9½′ × 12′ and the other 18′ × 4½′.	Do.	
	Do. ..	Do.	Puttur	39 0 0	Is a mud and thatched building 21′ long, 16½′ broad and 7′ high; containing 2 rooms 10½′ × 10′ and 19′ × 4′, with 2 verandahs 12′ × 5½′ and 12′ × 2′.	Used as Land Trade Registration office.	
	Do. ..	Range office ..	Do.	..	Is built of stone with a tiled roof and is 49′ long, 33½′ broad and 13½′ high; and contains 3 rooms 31½′ × 25′, 12′ × 12′ and 12′ × 7′, with 1 verandah on the east 12′ × 7′ and one on the north 12′ × 7′.	As Range office.	Was formerly Munsif's Court and was taken by the department in 1889–90.
	Do. ..	Tannah	Siradi	23 0 0	Is a mud and thatched building 28′ long, 12′ broad and 9′ high; containing 2 rooms 10′ × 10′ and 20′ × 6′, with verandah 19′ × 10′ and another 28′ × 3′ and a portico.	As tannah.	
	Do. ..	Do.	Charmadi ..	27 0 0	Is a mud and thatched building 28′ × 12′ × 9′; containing one room 19′ × 10′ with 2 verandahs 19′ × 10′ and 28′ × 3′.	Do.	
	Kásaragód .	Forest hut ..	Parappa teak plantation.	100 0 0	Is built of mud and has a thatched roof, it is 31½′ × 18 and consists of 2 rooms 16′ × 12′ and 12′ × 12′ with verandah on 3 sides.	Residence for watcher and rest-house for Range officer.	

ANNUAL FORM No. 59-A.

Forest Department, Madras Presidency.

AREA of Reserved Forests, 1892–93.

District.	Range.	Name of Forest.	AREA ON 1ST APRIL 1892.		ADDED DURING THE YEAR.	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 30TH JUNE 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
NORTHERN CIRCLE.										
Ganjám.	West Goomsur.	Dimrijholi	5,486	...	...	...	5,486	...	.....	
	East Goomsur.	Jaganathprasad ...	26,200	...	...	...	26,200	..	.....	
		Chondragiri ...	18,320	...	...	...	18,320	...	.....	
	Suradá ...	Bondagocha ...	4,400	...	...	...	4,400	...	.....	
		Malati ...	1,720	...	...	...	1,720	...	.....	
		Dabuki	1,450	...	...	...	1,450	...	.....	
		Vinjagiri	6,000	...	...	...	6,000	...	.....	
	Bugudá...	Punchbuthia ...	4,320	...	...	...	4,320	...	.....	
		Vishnuchakram ...	4,860	...	...	...	4,860	...	.....	
		Total ...	72,756	113·68	...	...	72,756	113·68		
Vizagapatam.	Sarvasiddhi.	Peddapalle	8,960	...	...	...	8,960	...	.....	
	Golgonda.	Arlova	...	...	2,473	...	2,473	...	No 496 of 14th Oct. 1892.	
		Kakarlakonda ...	...	...	1,924	...	1,924	...	Do.	
		Venkatapuram ...	...	...	508	...	508	...	Do.	
		Kodavatipudi ...	...	...	1,544	...	1,544	...	Do.	
		Total ...	8,960	14	6,449	...	15,409	24·08		
Gódávari.	Delta ...	Narasapur	114	...	..	...	114	...	.....	
		Coringa	7,000	..	...	...	7,000	...	.....	
		Bendemurlanka ...	362	...	...	..	362	...	.....	
	Rékapalle.	Pulsumamidi ...	4,520	...	...	..	4,520	...	.....	
		Marigúra	44,500	...	...	...	44,500	...	.....	
		Mattapalli	9,500	...	...	...	9,500	..	.....	
		Nelakota	2,500	...	...	...	2,500	...	.....	
	Bhadráchalam.	Komanpalli	3,250	...	...	...	3,250	..	.....	
	Marrigudem.	Bandroe	10,900	...	...	...	10,900	...	.....	
		Golagupa	8,000	..	...	...	8,000	...	.....	
		Narakonda	7,500	...	...	...	7,500	...	.....	
		Pengha	4,400	...	...	...	4,400	...	.....	
		Upanapali	3,300	...	...	...	3,300	...	.....	
		Tatlanka	12,000	...	...	...	12,000	...	.....	
		Ramachendram ...	10,300	...	...	...	10,300	...	.....	
		Rapak	7,000	...	...	...	7,000	...	.....	
		Sitarampuram ...	3,000	...	...	...	3,000	...	.....	
		Bhandargudem ...	7,100	...	...	...	7,100	...	.....	
		Burkankota ...	1,500	...	...	...	1,500	...	.....	
	Rékapalle.	Lakkavaram ...	6,500	...	...	...	6,500	...	.....	
		Kalleru	6,500	...	...	...	6,500	...	.....	
	Ellore ...	Chintalapudi ...	2,000	...	...	...	2,000	...	.....	
		Tadikalapudi ...	2,500	...	...	...	2,500	...	.....	
		Bandamcherla ...	5,200	...	...	...	5,200	...	.....	
		Erraguntapalli ...	8,640	...	...	...	8,640	...	.....	
		Velagalapalli ...	2,200	...	...	...	2,200	...	.....	
	Bhadráchalam.	Mulkanapalle ...	3,658	...	...	...	3,658	...	.....	
		Dummagudem ...	6,110	...	...	...	6,110	...	.....	
		Arlagúdem ...	6,136	...	...	...	6,136	...	.....	
		Tunikicheruvu ...	8,022	...	...	...	8,022	...	.....	
		Bhadráchalam ...	10,860	...	...	...	10,860	...	.....	
		Gogubaka	1,666	...	...	...	1,666	...	.....	
	Ellore ...	Barrikonda	3,500	...	...	...	3,500	...	.....	
	Rajahmundry.	Murari	700	...	...	...	700	...	.....	
	Rékapalle...	Kanslur	6,200	...	...	...	6,200	...	.....	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		NORTHERN CIRCLE—*cont.*								
Godávari —*cont.*	Rajahmundry.	Kovida	1,280	..	...	...	1,280	...	.....	
	Peddápur.	Veligogula	12,000	...	...	...	12,000	...	.....	
		Sarlanka	15,000	...	...	...	15,000	...	.....	
		Raghavapatnam ...	3,600	...	...	...	3,600	...	.....	
		Anantavaram ...	4,000	...	...	...	4,000	...	.....	
		Totapalli	2,150	...	...	...	2,150	...	.....	
	Ellore ...	Ramasingavaram ...	2,500	...	...	...	2,500	...	.....	
	Rajahmundry.	Molleru	...	...	8,250	...	8,250	...	No. 476 of 15th Jan 1892.	
		Sudikonda	...	...	6,880	...	6,880	...	No. 53 of 27th Jan. 1892.	
		Total ...	267,668	418·23	15,130	...	2,82,798	441·87		
Kistna.	Bander ...	Kara	21	...	...	...	21	...	.....	
		Vanudhuru	64	...	...	...	64	...	.....	
		Bomminampadu ...	26	...	...	...	26	...	.....	
		Vemavarampadu ...	16	...	...	...	16	...	.....	
		Allinagaram ...	125	...	.	...	125	...	.....	
		Bandar Fort ...	7,500	...	.	...	7,500	...	.....	
		Kodur	50	...	...	...	50	...	.....	
		Gollapalem	390	...	...	...	390	...	.....	
		Sorlagondi	2,880	...	...	...	2,880	...	.....	
		Yellachetladibba ...	4,640	...	...	...	4,640	...	.....	
		Konukollu	667	...	...	...	667	...	.....	
		Nachugunta ...	8,640	...	...	...	8,640	...	.....	
		Weld	75	...	...	...	75	...	.....	
		Palakayatippa ...	3,320	...	...	...	3,320	...	.....	
		Gopuvanipalem ...	206	...	...	...	206	...	.....	
	Bezwada.	Gavuravaram ...	84	...	...	...	84	...	.....	
		Bezwada	300	...	...	...	300	..	.....	
		Gunadala	400	...	...	...	400	...	.....	
		Kondapalli extension	1,225	...	...	...	1,225	...	.....	
		Budavada ...	4,650	...	...	...	4,650	...	.....	
		Jaggayyapéta ...	4,570	...	...	...	4,570	...	.....	
		Kothur	7,230	...	...	...	7,230	...	.....	
		Kondur	4,140	...	...	...	4,140	...	.....	
	Guntúr ...	Nidamarru	383	...	...	...	383	...	.....	
		Karlapudi	994	...	...	...	994	...	.....	
		Narakodur	515	...	...	...	515	...	.....	
		Kuragallu	1,305	...	...	...	1,305	...	.....	
		Tadepalli	2,305	...	...	...	2,305	..	.....	
		Kondavid	12,857	...	...	...	12,857	...	.....	
		Gollamudi	194	...	...	...	194	...	.....	
	Sattenapalle.	Konanki	3,600	...	...	...	3,600	...	.....	
		Bellamkonda ...	1,380	...	...	...	1,380	...	.....	
		Venkatayapalem ...	49,201	...	...	...	49,201	...	.....	
		Nevalipuri	11,500	...	...	...	11,500	...	.....	
	Vinukonda	Bollapalli ...	40,000	...		...	40,000	...	.....	
		Kakerala ...	17,520	...	...	...	17,520	...	.....	
		Guthikonda ...	37,760	...	...	...	37,760	...	.....	
	Palnád ...	Tummurukodu ...	24	...	...	...	24	...	.....	
		Gangalakunta ...	24,461	...	...	...	24,461	...	.....	
		Madinapad ...	9,600	...	...	...	9,600	...	.....	
	Bápatla.	Lankavanidibba ...	4,480	...	...	* 1,630	2,850	...	.....	* Rectification of area.
		Kothapalem No. I ...	3,840	...	...	...	3,840	...	.....	
		Dindi	600	...	...	...	600	...	.....	
		Adavuladivi ..	610	...	...	...	610	...	.....	
		Bápatla No. I ..	245	...	...	...	245	...	.....	
		Do. No. II ...	1,032	...	...	...	1,032	...	.....	
		Kardapalem No. I ...	105	...	...	...	105	...	.....	
		Do. No. II...	208	...	...	...	208	...	.....	
		Vedullapalli ...	176	...	...	...	176	...	.....	
		Muthayapalem ...	9,569	...	...	...	9,569	...	.....	
		Pandillapalli ...	162	...	...	...	162	...	.....	
		Waderevu	82	...	...	...	82	...	.....	
		Kothapalem No. II ..	3,100	...	...	...	3,100	...	.....	
		Nayanapalli ...	152	...	...	...	152	...	.....	
		Orr's Reserve ...	128	...	...	...	128	...	.....	
	Bezwada ...	Kondapalli	...	...	20,722	...	20,722	...	No. 308 of 24th June 1892.	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Northern Circle—*cont.*									
Kistna—*cont.*	Guntúr ...	Kolakalur	...	...	1,356	...	1,356	...	No. 282 of 15th June 1892.	
	Vinukonda.	Koppukonda ...	...	...	5,000	...	5,000	...	No. 300 of 24th June 1892.	
	Palnád.	Pasvemula	...	...	22,782	...	22,782	...	No. 93 of 5th Mar. 1892.	
		Kundlagunta ...	...	...	34,947	...	34,947	...	No. 47 of 22nd Jan. 1892.	
		Tangedu	...	...	1,300	...	1,300	...	No. 543 of 25th Nov. 1892.	
		Mutukur	...	...	31,360	...	31,360	...	No. 258 of 1st June 1892.	
		Total ...	289,307	452·04	117,467	1,630	405,144	633·04		
Anantapur.	Gooty ...	Khojjapalle ..	342	...	...	...	342	..	.....	
		Pamidi	640	...	...	...	640	...	.....	
	Muchukota.	Anantapur ...	129	...	...	...	129	...	.....	
	Penukonda.	Narasampalle ...	2,210	...	...	...	2,210	...	.....	
		Kottakota	11,016	...	...	...	11,016	...	.....	
		Neiradykonda ...	2,217	...	...	...	2,217	...	.....	
	Dharmavaram.	Boodikonda A & B ...	1,275	...	...	...	1,275	...	.....	
	Hindúpur...	Somarajmalai ...	2,115	...	...	...	2,115	...	.....	
	Gooty ...	Guntakal No. I ...	...	...	384	...	384	...	Nos. 67, 68 & 69 of 13th Feb. 1892.	
		Do. II ...	...	...	165	...	165	...		
		Do. III ...	...	...	384	...	384	...		
		Peddadoddi ...	...	...	2,479	...	2,479	...	No. 237 of 16th May 1892.	
		Bhadrampalli ...	...	...	4,226	...	4,226	...	No. 17 of 9th Jan. 1893.	
	Muchukota.	Durgam	...	...	3,640	...	3,640	...	No. 407 of 22nd Aug. 1893.	
		Kunukuntla ...	...	...	1,616	...	1,616	...	No. 406 of 22nd Aug. 1892.	
		Chillavaripalli ...	...	...	4,980	...	4,980	...	No. 409 of 22nd Aug. 1892.	
		Daditota	...	...	3,634	...	3,634	...	No. 456 of 21st Sep. 1892.	
		Neriyampalli ...	...	...	2,285	...	2,285	...	No. 485 of 10th Oct. 1892.	
		Yellutla	..	...	9,182	...	9,182	...	No. 38 of 16th Jan. 1893.	
	Dharmavaram.	Bhadrapur	...	...	5,120	...	5,120	...	No. 151 of 12th April 1892.	
		Kalyandrug, North...	...	...	475	...	475	...	Nos. 294 & 303 of 15th June 1892.	
		Do. South...	...	...	996	...	996	...		
	Penukonda.	Agraharam	...	...	2,134	...	2,134	...	No. 562 of 28th Nov. 1892.	
		Vengalammacheruvu.	...	...	2,371	...	2,371	...	No. 18 of 9th Jan. 1893.	
	Hindúpur..	Kondur	...	...	607	...	607	...	No. 353 of 1st Aug. 1892.	
		Total ...	19,944	31·16	44,678	...	64,622	100·97		
Bellary.	Bellary ...	Timmapuram ...	1,046	...	...	...	1,046	...	.. ...	
		Tekkalakóta ...	600	...	...	...	600	...	.....	
		Bellary	8,000	...	...	...	8,000	...	.....	
		Tornagallu	2,100	...	...	...	2,100	...	.....	
		Halikota	640	...	...	...	640	...	.....	
		Kurugódu, West ...	750	...	...	...	750	...	.....	
		Do. North-West	250	...	...	...	250	...	.....	
		Rayadurgam ..	6,000	...	...	...	6,000	...	.....	
		Mincheri	4,000	...	...	...	4,000	...	.....	
		Aduguppa	950	...	...	...	950	...	.....	
	Sandúr.	Joga	3,264	...	...	...	3,264	...	.....	
		Gollalingammanahalli.	1,000	...	...	...	1,000	...	.....	
		Gundu	5,456	...	...	...	5,456	...	.....	
		Somalapuram ...	2,600	...	...	...	2,600	...	.....	
		Tummaraguddi ...	2,500	...	...	...	2,500	...	.....	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Northern Circle—*cont.*										
Bellary —*cont.*	Kúdligi.	Shivapuram ...	9,000	...	...	...	9,000	...	.....	
		Chiribi	3,000	...	...	...	3,000	...	.....	
		Sunkadakallu ...	7,000	...	...	...	7,000	...	.....	
	Ádóni ...	Halvi	1,209	...	...	...	1,209	...	.....	
		Halekota	438	...	...	...	438	...	... .	
		Gummanur (N., N.-E., N.-W.).	646	...	...	...	646	...	.....	
		Yerura (S., S.-W., W.)	522	...	...	...	522	...	.....	
		Chippigiri (S., S.-E., W.).	1,160	...	...	...	1,160	...	.....	
		Degalahalu	110	...	...	...	110	...	.....	
		Nandavaram ...	958	...	...	...	958	...	.....	
		Katalam	658	...	...	...	658	...	.. ...	
		Banavasi	2,109	...	...	...	2,109	...	.....	
		Badanahalu	940	...	...	...	940	...	.. ...	
	Bellary ...	Suguru	...	...	530	...	530	...	No. 190 of 7th May 1892.	
		Nadivi	...	...	425	...	425	..	No. 210 of 10th May 1892.	
		Vonnahalli	...	...	105	...	105	..	No. 400 of 18th Aug. 1892.	
		Mundrigi	..	...	49	...	49	..	No. 364 of 11th Aug. 1892.	
		Dharmapuram ...	...	...	4,100	...	4,100	...	No. 487 of 12th Oct. 1892.	
	Ádóni ...	Ganekallu	...	...	1,070	...	1,070	...	No. 259 of 10th June 1892.	
		Kotekallu	...	...	2,575	...	2,575	...	No. 379 of 25th July 1892.	
		Ádóni, East	...	...	1,834	...	1,834	...	No. 190 of 27th Feb. 1893.	
		Ramadurgamkonda.	...	...	337	...	337	.	No. 549 of 25th Nov. 1892.	
		Nagaradona ...	...	...	140	...	140	..	No. 572 of 6th Dec. 1892.	
		Kenchigara Belagallu.	...	...	856	...	856	...	No. 91 of 6th Feb. 1893.	
		Holalagondi ...	...	...	906	...	906	...	No. 21 of 9th Jan. 1893.	
		Muddatamagi ...	...	...	317	...	317	...	No. 33 of 16th Jan. 1893.	
		Virupapuram ...	...	...	110	...	110	...	No. 37 of 19th Jan. 1893.	
		Pagalachukkuvanka.	...	...	241	...	241	...	No. 101 of 13th Feb. 1893.	
	Sandúr ...	Ubbalagundi ...	...	...	692	...	692	...	No. 116 of 18th Mar. 1892.	
		Hospet	..	...	3,030	...	3,030	...	No. 236 of 26th May 1892.	
		Bandri	...	...	16,239	...	16,239	...	No. 495 of 17th Oct. 1892.	
		Bukkasagaram ...	...	...	5,987	...	5,987	...	No. 590 of 7th Dec. 1892.	
		Bellekallu	...	...	12,447	...	12,447	...	No. 149 of 17th Mar. 1893.	
	Kúdligi ...	Alagilavada ...	...	...	1,900	...	1,900	...	No. 120 of 16th Mar. 1892.	
		Nimbalagiri ...	...	...	4,792	...	4,792	...	No. 192 of 7th May 1892.	
		Banivikallu ...	..	..	3,564	...	3,564	...	No. 213 of 12th May 1892.	
		Sunkadakalla, East.	...	...	843	...	843	...	No. 380 of 17th Aug. 1892.	
		Ramadurgam ...	...	...	2,500	...	2,500	...	No. 595 of 6th Dec. 1892.	
		Uchchangidurgam ...	...	...	4,200	...	4,200	...	No. 23 of 9th Jan. 1893.	
		Total ...	66,906	104·54	69,789	...	136,695	213·58		

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		Northern Circle—*cont.*								
Kurnool.	Sirvel ...	Sirvel	116,730	...	...	...	116,730	...	.....	
	Cumbum..	Veligondas, South ...	16,755	...	...	...	16,755	...	.....	
		Do. North ...	21,540	...	...	...	21,540	...	.....	
		Uyyalavada ...	76,800	...	...	...	76,800	...	.....	
	Nandyal and Nandikotkur.	Nandyal	185,700	...	...	...	185,700	...	.....	
		Nandikotkur ...	256,000	...	...	...	256,000	...	.....	
	Ramallakot.	Ramallakot, East ...	1,000	...	...	...	1,000	...	.....	
		Do. West ...	1,000	...	...	...	1,000	...	.....	
		Lanjabanda ...	2,000	...	...	...	2,000	...	.....	
		Yaperlapad ...	3,384	...	...	...	3,384	...	.....	
		Gadidamadugu ...	2,891	...	...	...	2,891	...	.....	
	Cumbum and Markapur.	Cumbum	...	...	217,600	...	217,600	...	No. 104 of 7th March 1892.	
	Markapur.	Markapur	...	...	181,875	...	181,875	...	No. 105 of 5th Mar. 1892.	
	Cumbum ...	Western Veligondas.	...	...	17,780	...	17,780	...	No. 50 of 22nd Jan. 1892.	
	Ramallakot.	South Dhone ...	...	...	3,989	...	3,989	...	No. 52 of 19th Jan. 1892.	
		Total ...	683,800	1,068·44	421,244	...	1,105,044	1,726·63		
		Total of the Circle ...	1,409,341	2,202·09	674,757	1,630	2,082,468	3,253·85		
		Central Circle.								
Nellore.	Ongole ...	Kottapatam ...	147	...	...	...	147	...	.....	
		Kanuparti	520	...	...	...	520	...	.....	
		Ongole Hill ...	60	...	...	...	60	...	.....	
	Kandukur.	Ramapatam Casuarina Plantation.	60	...	...	...	60	...	.....	
		Chagollu	1,010	...	...	...	1,010	...	.....	
		China Laterapi ...	1,548	...	...	...	1,548	...	.....	
		Ravur	2,187	...	...	...	2,187	...	.....	
		Chakicherla ..	323	...	...	...	323	...	.....	
		Ramapatam ...	1,516	...	...	...	1,516	...	.....	
		Boddipudi ...	500	...	...	...	500	...	.....	
		Gudlur	3,297	...	...	...	3,297	...	.....	
		Macherla Chelamcherla.	12,236	...	...	..	12,236	...	.....	
	Kávali ...	Tummalapenta ...	100	...	...	...	100	...	.....	
		Maddurpad ...	2,012	...	...	...	2,012	...	.....	
		Zaladanki, East ...	600	...	...	...	600	...	.....	
		Do. West ...	1,254	...	...	...	1,254	...	.....	
		Tummalapenta, South.	392	...	...	...	392	...	.....	
		Dharmavaram ...	189	...	...	...	189	...	.....	
		Zammalapalem ...	1,130	...	...	...	1,130	...	.....	
		Rudrakota	2,100	...	...	...	2,100	...	.....	
		Gattupalli	838	...	...	...	838	...	.....	
		Gollapalem	960	...	...	...	960	...	.....	
		Tallapalem	848	...	...	..	848	...	.....	
		Manubolupad ...	1,192	...	...	...	1,192	...	.....	
		Chinna Annalur ...	3,400	...	...	...	3,400	...	.....	
		Kávali	2,000	...	...	...	2,000	...	.....	
		Dundigam	515	...	...	...	515	...	.....	
		Chamadala	750	...	...	...	750	...	.....	
		Zakkepalli-Gudur ...	800	...	...	...	800	...	.....	
		Nagalavaram ...	414	...	...	...	414	...	.....	
		Tummalapenta, West.	2,280	...	...	...	2,280	...	.....	
		Bitragunta	1,908	...	...	...	1,908	...	.....	
		Narayanapuram ...	2,392	...	...	...	2,392	...	.....	
		Kesavaram	908	...	...	...	908	...	.....	
		Tummalapenta, North.	1,300	...	...	...	1,300	...	.....	
	Nellore ...	Iskapalle	23	...	...	...	23	...	.....	
		Kandamur	1,520	...	...	...	1,520	...	.....	
		Kakutur	480	...	...	...	480	...	.....	
		Dontali	1,280	...	...	...	1,280	...	.....	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Nellore—*cont.*	Nellore—*cont.*	Chemudugunta ...	320	...	...	...	320	...	.....	
		Utukur-Varni Casuarina Plantation.	607	...	...	...	607	...	.....	
		South Mopur ...	1,000	...	...	...	1,000	...	.....	
		Kottapalli	4,230	...	...	...	4,230	...	.....	
		Marripad	1,400	...	...	...	1,400	...	.....	
		Turimerla	620	...	...	...	620	...	.....	
		Allipuram	125	...	...	...	125	...	.....	
		Amencherla, East ...	960	...	...	...	960	...	.....	
		Do. West...	480	...	...	...	480	...	.....	
		Vavveru	2,970	...	...	...	2,970	...	.....	
		Dagadarti	2,866	...	...	...	2,866	...	.....	
		Kondlapudi	1,500	...	...	...	1,500	...	.....	
	Gudur ...	Dugarazpatnam ...	1,200	...	...	...	1,200	...	.....	
		Kanupur, East ...	960	...	...	...	960	...	.....	
		Vendodu	818	...	...	...	818		.....	
		Idagali	480	...	...	...	480	...	.....	
		Vodur	883	...	...	...	883	...	.....	
		Gudur	950	...	...	...	950	...	.....	
		Tammenapatam Casuarina Plantation.	485	...	...	...	485	...	.....	
		Cherukumudi ...	640	...	...	...	640	...	.....	
		Vellipedu	720	...	...	...	720	...	.....	
		Chillakur	460	...	...	...	460	...	.....	
		Vinduru	300	...	...	...	300	...	.....	
		Nellaballi	275	...	...	...	275	...	.....	
		Kadived, South ...	450	...	...	...	450	...	.....	
		Do. North ...	468	...	...	...	468	...	.....	
		Ankalapatur ...	240	...	...	...	240	...	.....	
		Pidatalapudi ...	750	...	...	...	750	...	.....	
		Madamanur ...	560	...	...	...	560	...	.....	
		Kanupur, West ...	1,974	...	...	...	1,974	...	.....	
		Ipur	1,033	...	...	...	1,033	...	.....	
		Survepalli	2,750	...	...	...	2,750	...	.....	
		Momidi	2,500	...	...	...	2,500	...	.....	
		Tamenapatam, West.	350	...	...	...	350	...	.....	
		Yellasiri	2,518	...	...	...	2,518	...	.....	
		Vedicherla	850	...	...	...	850	...	.....	
	Átmakúru	Telugurayapuram ...	763	...	...	...	763	..	.....	
		Srikolanu	1,521	...	...	...	1,521	...	.....	
		Chejerla	1,121	...	...	...	1,121	...	.....	
		Turpukambampad ...	861	...	...	...	861	...	.....	
		Bommavaram ...	3,000	...	...	...	3,000	...	.....	
		Prabhagiripatnam ..	2,500	...	...	...	2,500	...	.....	
		Turrimerla	640	...	...	...	640	...	.....	
		Pulikollu	740	...	...	...	740	...	.....	
		Morapur	3,130	...	...	...	3,130	...	.....	
		Todaru	750	..	...	...	750	...	.....	
		Vutukur	725	...	...	...	725	...	.....	
		Duggunta	1,200	...	...	...	1,200	...	.....	
		Mogallur	957		...	...	957	...	.....	
		Ayyavaripalem ...	320	...	...	...	320	...	.....	
		Chikavolu	1,100	...	...	...	1,100	...	.....	
		Chittalur	515	...	...	...	515	...	.....	
		Nellapalli	2,100	...	...	...	2,100	...	.....	
		Turpupundla ..	1,000	...	...	...	1,000	...	.....	
		Vavistaparti ...	1,300	...	...	...	1,300	...	.....	
	Rapur ...	Tummalatalpur ...	4,000	...	...	...	4,000	...	.....	
		Chaganam	1,500	...	...	...	1,500	...	.....	
		Vadlapudi	2,400	...	...	...	2,400	...	.....	
		Biradavolu	2,250	...	...	...	2,250	...	.....	
		Paluru	210	...	...	...	210	...	.....	
		Griddalur	700	...	...	...	700	...	.....	
		Potukonda	1,860	...	...	...	1,860	...	.....	
		Marellakonda ...	400	...	...	...	400	...	.....	
		Guttikonda	180	...	...	...	180	...	.....	
		Kummaragunta ...	440	...	...	...	440	...	.....	
		Kakalakonda ...	1,850	...	...	...	1,850	...	.....	
		Rapur Veligonda, A and B.	30,720	...	...	...	30,720	...	.....	
		Nernur	1,190	...	...	...	1,190	...	.....	

Area of Reserved Forests, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Nellore —*cont.*	Udayagiri.	Udayagiri, East, and Appasamudram.	1,500	...	...	...	1,500	...	.....	
	Nellore ...	Nellore	...	...	640	...	640	...	No. 110 of 23rd Feb. 1893.	
	Gudur ...	Kottapatam... ...	...	...	2,000	...	2,000	...	No. 239 of 26th May 1892.	
	Rapur ...	Potegunta Linganapalem.	...	...	1,500	...	1,500	...	No. 44 of 19th Jan. 1892.	
		Cherlopalli	...	...	3,360	...	3,360	...	No. 57 of 2nd Feb. 1892.	
		Podalakur	...	...	2,500	...	2,500	...	No. 129 of 23rd Mar. 1892.	
		Veminabhi	...	...	2,250	...	2,250	...	No. 276 of 15th June 1892.	
		Marlapudi	...	...	4,550	...	4,550	...	No. 277 of 16th June 1892.	
		Sydapuram	...	...	1,630	...	1,630	...	No. 297 of 22nd June 1892.	
	Udayagiri...	Udayagiri Durgam...	...	...	11,280	...	11,280	...	No. 440 of 13th Sept. 1892.	
	Kanigiri...	Nandanavanam ...	...	...	18,000	...	18,000	...	No. 334 of 27th July 1892.	
		Kanigiri Durgam ...	...	...	2,000	...	2,000	...	No. 494 of 14th Oct. 1892.	
		Total	168,124	262·69	49,710	...	217,834	340·37		
Cuddapah.	Kódúru ...	Kódúru Plantation ...	50	...	...	...	50	...	.....	
		Thanakonda ...	1,048	...	...	...	1,048	...	.....	
		Uparapalle	108	...	...	...	108	...	.....	
		Kódúru Hill... ...	7,440	...	...	...	7,440	...	.....	
		Seshachellam ...	128,000	...	...	...	128,000	...	.....	
		Settikunta	8,960	...	...	...	8,960	...	.....	
		Avalapenta	1,434	...	...	...	1,434	...	.....	
		Gotimanikona ...	3,732	...	...	...	3,732	...	.....	
		Mushtiyeru	6,432	...	...	...	6,432	...	.....	
	Rájampét.	Salivendra	12,800	...	...	...	12,800	...	.....	
		Pullampet	426	...	...	...	426	...	.....	
		Reddipalle	1,284	...	...	...	1,284	...	.....	
		Vattalur	2,880	...	...	...	2,880	...	.....	
	Sidhout ...	Kanamalapalle ...	4,435	...	...	...	4,435	...	.....	
		Malliamkonda ...	10,240	...	...	...	10,240	...	.....	
	Cuddapah...	Kamalápuram ...	485	...	...	...	485	...	.....	
	Badvél	Kavalakuntla ...	9,920	...	...	...	9,920	...	.....	
		Gunugapenta ...	14,080	...	...	...	14,080	...	.....	
	Ráyachóti.	Gadikota	12,462	...	...	...	12,462	...	.....	
		Sibbyala	3,500	...	...	...	3,500	...	.....	
		Tsundapalle ...	3,000	...	...	...	3,000	...	.....	
		Vandadi	3,390	...	...	...	3,390	...	.....	
	Váyalpad ...	Yellutla	2,840	...	...	...	2,840	...	.....	
	Madanapalle.	Kotammakonda ...	640	...	...	...	640	...	.....	
		Madhanikonda ...	1,750	...	...	...	1,750	...	.....	
		Nallakonda ...	3,856	...	...	...	3,856	...	.....	
		Kukkarajupalle ...	1,660	...	...	...	1,660	...	.....	
		Pulikonda	2,460	...	...	...	2,460	...	.....	
		Mothugamala ...	2,674	...	...	...	2,674	...	.....	
	Kadiri ...	Vellichellamala ...	3,560	...	...	...	3,560	...	.....	
		Mudupulajuvvi ...	1,226	...	...	...	1,226	...	.....	
		Kukkarazukonda ...	2,720	...	...	...	2,720	...	.....	
	Váyalpad.	Doddipalle	1,981	...	...	...	1,981	...	.....	
		Peddamalleja ...	3,698	...	...	...	3,698	...	.....	
	Váyalpad and Madanapalle.	Guttapalem ...	...	...	2,522	...	2,522	...	No. 56 of 2nd Feb. 1892.	
	Kódúru ...	Chivyaveram ...	...	...	2,666	...	2,666	...	No. 174 of 27th April 1892.	
	Proddatur...	Dhodiyam	...	...	1,800	...	1,800	...	No. 204 of 11th May 1892.	
	Váyalpad ...	Ankalammakonda ...	...	...	4,640	...	4,640	...	No. 207 of 11th May 1892.	
	Kadiri ...	Tummala	...	...	24,097	...	24,097	...	No. 257 of 8th June 1892.	

Area of Reserved Forests, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		CENTRAL CIRCLE—*cont.*								
Cuddapah—*cont.*	Ráyachóti.	Madhaveram ...	...	...	4,681	...	4,681	...	No. 335 of 22nd July 1892.	
	Madanapalle.	Potapolu	...	...	264	...	264	...	No. 352 of 1st Aug. 1892.	
		Pentsupadu ...	...	...	2,870	...	2,870	...	No. 396 of 22nd Aug. 1892.	
	Kadiri ...	Niggadi	...	...	27,770	...	27,770	...	No. 418 of 24th Aug. 1892.	
	Madanapalle.	Avalakonda ...	...	...	7,700	...	7,700	...	No. 419 of 24th Aug. 1892.	
	Proddatur.	Yamavaram ...	...	...	1,600	...	1,600	...	No. 434 of 5th Sept. 1892.	
	Vayalpad.	Bhakarapet ...	...	...	10,600	...	10,600	...	No. 474 of 5th Oct. 1892.	
		Talakonda	...	...	18,900	...	18,900	...	No. 498 of 14th Oct. 1892.	
	Sidhout ...	Vontimitta	...	...	4,500	...	4,500	...	No. 509 of 2nd Nov. 1892.	
	Vayalpad and Madanapalle.	Nurukuppalakonda.	...	...	8,461	...	8,461	...	No. 511 of 1st Nov. 1892.	
	Madanapalle.	Tavalam	...	...	8,450	...	8,450	...	No. 513 of 2nd Nov. 1892.	
	Pulivendla and Kadiri.	Dorigallu	...	...	24,032	...	24,032	...	No. 514 of 31st Oct. 1892.	
		Gorivikanama ...	...	...	30,560	...	30,560	...	No. 518 of 7th Nov. 1892.	
	Proddatur.	Kondasunkerla ...	...	...	2,612	...	2,612	...	No. 523 of 7th Nov. 1892.	
	Madanapalle.	Horsleykonda Mudimadugu.	...	...	15,500	...	15,500	..	No. 574 of 28th Nov. 1892.	
	Ráyachóti, Vayalpad.	Urukonda	...	...	7,986	...	7,986	...	No. 576 of 28th Nov. 1892.	
	Cuddapah.	Gonumakulapalli ...	...	...	1,280	...	1,280	...	No. 578 of 28th Nov. 1892.	
	Kadiri ...	Somarazumala East.	...	...	910	...	910	...	No. 579 of 28th Nov. 1892.	
	Proddatur.	Kosinepalle ...	...	...	4,300	...	4,300	...	No. 591 of 12th Dec. 1892.	
	Sidhout, Badvel and Cuddapah.	Lankamalais ...	...	...	6,9760	...	69,760	...	No. 594 of 6th Dec. 1892.	
	Proddatur.	Malamidakambaladinne.	...	...	2,120	...	2,120	...	No. 598 of 7th Dec. 1892.	
	Rájampét and Sidhout.	Kothur	...	...	12,160	...	12,160	...	No. 599 of 12th Dec. 1892.	
	Cuddapah.	Tummalur	...	...	1,450	...	1,450	...	No. 600 of 12th Dec. 1892.	
	Madanapalle and Váyalpad.	Tarigonda	...	...	6,831	...	6,831	...	No. 8 of 7th Dec. 1892.	
	Kadiri ...	Tummalamala ...	...	...	8,210	...	8,210	...	No. 9 of 19th Dec. 1892.	
	Madanapalle.	Tsadukonda... ...	...	..	15,023	...	15,023	...	No. 39 of 19th Jan. 1893.	
	Vayálpad.	Sorrakayalapet ...	...	...	2,832	...	2,832	...	No. 111 of 23rd Feb. 1893.	
	Proddatur.	Pennér	...	...	520	...	520	...	No. 132 of 6th March 1893.	
	Sidhout ...	Konarazupalle ...	...	...	9,696	...	9,696	...	No. 140 of 17th March 1893.	
		Ramapuram ...	...	...	5,300	...	5,300	...	No. 141 of 17th March 1893.	
		Total ...	265,171	414·33	352,603	...	617,774	965·27		
Chingleput.	Tiruvallúr.	Kambakkam ...	14,951	...	...	...	14,951	...	.....	
		Sathiavedu	6,859	...	...	...	6,859	...	.....	
		Ambakkam ...	5,259	...	...	...	5,259	...	.....	
		Aradur	2,680	...	..	...	2,680	...	.....	
		Kadur	2,494	...	...	...	2,494	...	.....	

Area of Reserved Forests, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Chingleput—*cont.*	Tiruvallúr—*cont.*	Ugumudi	2,874	...	...	...	2,874	...	.....	
		Allikuli	5,649	...	...	...	5,649	...	.....	
		Nagalapuram ...	8,345	...	...	...	8,345	...	.....	
		Palavukkam ...	2,511	...	...	...	2,511	...	.....	
		Pulrambakkam ...	577	...	...	...	577	...	.....	
		Mylapore ...	930	...	...	...	930	...	.....	
		Vembedu ...	1,075	...	...	...	1,075	...	.....	
		Alamadi	1,263	...	...	...	1,263	...	.....	
		Vengatkur	312	...	...	...	312	...	.....	
		Tirukkalukunram ...	697	...	...	...	697	...	.....	
		Oragadam ...	540	...	...	...	540	...	.....	
		Madayathur ...	697	...	...	...	697	...	.....	
		Vallam	1,328	...	...	...	1,328	...	.....	
		Nemali	633	...	...	...	633	...	.....	
		Anjur	1,514	...	...	...	1,514	...	.....	
		Alapakkam, A and B.	486	...	...	...	486	...	.....	
		Tirumani	639	...	...	...	639	...	.....	
		Vandalur	3,207	...	...	...	3,207	...	.....	
		Senkunram	1,232	...	...	...	1,232	...	.....	
		Kolathur *alias* Appur	1,449	...	...	...	1,449	...	.....	
		Venkatapuram ...	119	...	...	...	119	...	.....	
		Tiruteri	272	...	...	...	272	...	.....	
		Paranur	378	...	...	...	378	...	.....	
		Kotankolattur ...	535	...	...	...	535	...	.....	
		Kavanur	569	...	...	...	569	...	.....	
		Siruvanjur	465	...	...	...	465	...	.....	
		Orathur	312	...	...	...	312	...	.....	
		Vattambakam ...	694	...	...	...	694	...	.....	
	Chingleput.	Vadakupattu ...	795	...	...	...	795	...	.....	
		Kuttrambakam, A...	126	...	...	...	126	...	.....	
		Do. B...	205	...	...	...	205	...	.....	
		Puduppur	375	...	...	...	375	...	.....	
		Mannur	570	...	...	...	570	...	.....	
		Nallur	937	...	...	...	937	...	.....	
		Maganiyam ...	946	...	...	...	946	...	.....	
		Kalvayi	138	...	...	...	138	...	.....	
		Kolathur	1,909	...	...	...	1,909	...	.....	
		Kayar	642	...	...	...	642	...	.....	
		Taiyur	1,084	...	...	...	1,084	...	.....	
		Sonallur	1,107	...	...	...	1,107	...	.....	
		Unamanjeri ...	750	...	...	...	750	...	.....	
		Kumili	690	...	...	...	690	...	.....	
		Kottur	2,960	...	...	...	2,960	...	.....	
		Alathur	488	...	...	...	488	...	.....	
		Illalur	692	...	...	...	692	...	.....	
		Sirukunram, A ...	869	...	...	...	869	...	.....	
		Do. B ...	378	...	...	...	378	...	.....	
		Hanumantaputteri...	286	...	...	...	286	...	.....	
		Tandrai	664	...	...	...	664	...	.....	
		Pulikaradu	176	...	...	...	176	...	.....	
		Tambaram	262	...	...	...	262	...	.....	
		Kadapperi	227	...	...	...	227	...	.....	
		Selaiyur	498	...	...	...	498	...	.....	
		Maduraipakkam ...	351	...	...	...	351	...	.....	
		Nanmangalam ...	328	...	...	...	328	...	.....	
		Erumaiyur	192	...	...	...	192	...	.....	
		Arasankalnai ...	185	...	...	...	185	...	.....	
	Saidapet.	Perumbakkam, A ...	636	...	...	...	636	...	.....	
		Do. B ...	117	...	...	...	117	...	.....	
		Maiyur	534	...	...	...	534	...	.....	
		Kovilpidagai ...	377	...	...	...	377	...	.....	
		Sikkarayapuram ...	93	...	...	...	93	...	.....	
		Kuttambakam ...	300	...	...	...	300	...	.....	
		Mittamalai	267	...	...	...	267	...	.....	
		Tirumalavayal ...	386	...	...	...	386	...	.....	
		Nandambakkam ...	259	...	...	...	259	...	.....	
		Tirusulam	260	...	...	...	260	...	.....	
	Tiruvallúr.	Budur	...	...	86	...	86	...	No. 92 of 9th Feb. 1893.	
		Kuvukolli	...	...	228	...	228	...	No. 84 of 6th Feb. 1893.	
		Nelvoyi	...	...	161	...	161	...	No. 34 of 16th Jan. 1893.	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Chingleput—*cont.*	Tiruvallúr—*cont.*	Kolathur	...	...	212	..	212	...	No. 87 of 9th Feb. 1893.	
		Nayapakkam, B. ...	...	...	163	...	163	...	No. 86 of 9th Feb. 1893.	
		Do. C. ...	...	...	105	...	105	...	No. 94 of 9th Feb. 1893.	
		Attantangal ...	...	...	268	...	268	...	No. 109 of 24th Feb. 1893.	
		Kavalur	...	...	230	...	230	...	No. 85 of 6th Feb. 1893.	
		Kurivithittoo ...	...	...	300	...	300	...	No. 112 of 24th Feb. 1893.	
		Peria Obalapuram...	...	...	66	...	66	...	No. 90 of 9th Feb. 1893.	
		Siruvalipettai, B. ...	...	...	54	...	54	...	No. 93 of 6th Feb. 1893.	
	Chingleput.	Mambakkam ...	...	....	726	...	726	...	No. 89 of 9th Feb. 1893.	
		Gudalur ...	...	...	2,744	...	2,744	...	No. 441 of 7th Sep. 1892.	
		Total ...	93,604	146·26	5,343	...	98,947	154·60		
North Arcot.	Chittoor.	Paradarami ...	15,043	...	...	...	15,043	...	.....	
		Pachigunta	1,800	...	...	...	1,800	...	.....	
		Kinatipalli	1,417	...	...	...	1,417	...	.....	
		Cheelapalli	1,296	...	...	..	1,296	...	.....	
		Santhapet	2,096	...	...	...	2,096	...	.....	
		Basavapalli, A and B.	1,937	...	...	...	1,937	...	.....	
		Mahimandalam ...	2,516	...	...	...	2,516	...	.....	
	Chittoor and Chandragiri.	Penamur	2,097	...	...	...	2,097	...	.....	
	Chandragiri.	Napier Reserve ...	8,772	...	...	...	8,772	...	.....	
		Mamundur	1,776	...	...	...	1,776	...	.....	
		Chamala	9,600	...	...	...	9,600	...	.....	
		Panapauk	6,400	...	...	...	6,400	...	.....	
		Pudipatla Bail ...	2,560	...	...	...	2,560	...	.....	
		Gazulamandiem ...	250	...	...	...	250	...	.....	
		Mamandur Extension	8,000	...	...	...	8,000	...	.....	
		Tirupati Hill ...	16,000	...	...	...	16,000	...	.....	
	Palmanér.	Musalimadugu ...	9,600	...	...	...	9,600	...	.....	
		Basvireddipalle ...	10,240	...	...	...	10,240	...	.....	
		Peddur	9,600	...	...	...	9,600	...	.....	
		Palmanér Tope ...	2	...	...	...	2	...	.....	
		Nagamangalam ...	31	...	...	...	31	...	.....	
		Peduguvaripalle ...	20	...	...	...	20	...	.....	
		Venkatagirikota ...	4	...	...	...	4	...	.....	
		Byreddipalle ...	4	...	..	...	4	...	.....	
		Charagallu ...	18,911	...	...	..	18,911	...	.....	
	Palmanér and Gudiyátam.	Mordana	23,800	...	...	...	23,800	...	.....	
		Naickaneri	6,400	...	...	...	6,400	...	.....	
	Gudiyáttam.	Ambur Drug ...	5,760	..	...	...	5,760	...	.....	
		Tiruvallam Plantation	435	...	...	...	435	...	.....	
		Virinjipuram do.	260	...	...	...	260	...	.....	
		Cheynur Tope ...	130	...	...	...	130	...	.....	
		Amundi Plantation.	160	...	...	...	160	...	.....	
		Tandrayagunta Tope.	2	...	...	...	2	...	.....	
		Vikramasi	161	...	...	...	161	...	.....	
		Naickaneri Extension	1,280	...	...	...	1,280	...	.....	
	Vellore.	Ambur Fuel Coupe.	3,840	...	...	...	3,840	...	.....	
		Palamadi	6,400	...	...	...	6,400	...	.....	
		Ambur Tope ...	5	...	...	...	5	...	.....	
	Polur ...	Carnatic Ghur ...	7,069	...	...	...	7,069	...	.....	
		Ammerdi Plantation.	25	...	...	...	25	...	.....	
		Puthur	12,800	...	...	...	12,800	...	.....	
		Kappalur	1,114	...	...	...	1,114	...	.....	
		Patrakad	19,200	...	...	...	19,200	...	.....	
		Virappanur	64,000	...	...	...	64,000	...	.....	
		Kelur	2,866	...	...	...	2,866	...	.....	
		Malayalam	11,462	...	...	...	11,462	...	.....	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		CENTRAL CIRCLE—*cont.*								
North Arcot —*cont.*	Vellore and Polur.	Thellai	15,121	...	...	...	15,121	...	.....	
	Arcot ...	Punganúr	3,743	...	...	...	3,743	...	.....	
		Kilminnel Plantation.	150	...	...	...	150	...	.....	
		Sennaleri	1,675	...	...	...	1,675	...	.....	
		Sattur	709	...	...	...	709	...	.....	
		Tandapantangal ...	1,092	...	...	...	1,092	...	.....	
		Enadavadi	1,565	...	...	...	1,565	...	.....	
	Walajapet.	Vannivedu Plantation.	30	...	...	...	30	...	.....	
		Arkonam Sub-Magistrate's Office compound.	5	...	...	...	5	...	.....	
		Arkonam Tope ...	37	...	...	...	37	...	.....	
		Gudalur	535	...	...	...	535	...	.....	
		Anantapuram or Uriyur.	540	...	...	...	540	...	.....	
		Ammanur	203	...	...	...	203	...	.....	
		Banavaram	1,051	...	...	...	1,051	...	.....	
	Wandiwash.	Brammakateri ...	635	...	...	...	635	...	.....	
		Kodiyalam	125	...	...	...	125	...	.....	
		Badur	783	...	...	...	783	...	.....	
		Vengunam	1,288	...	...	...	1,288	...	.....	
		Nambedu	707	...	...	...	707	...	.....	
		Vishamangalam ...	1,148	...	...	...	1,148	...	.....	
	Chittoor.	Chittapara	...	...	4,250	...	4,250	...	No. 119 of 18th March 1892.	
		Virisettipalle, A ...	...	...	5,464	...	5,464	...	No. 295 of 21st June 1892.	
		Do. B ...	...	...	1,823	...	1,823	...	No. 301 of 21st June 1892.	
		Irala	...	...	16,122	...	16,122	...	No. 22 of 10th Jan. 1893.	
		Bommasamudram ...	...	...	1,242	...	1,242	...	No. 597 of 13th Dec. 1892.	
		Vavilitota	...	...	2,495	...	2,495	...	No. 19th of 2nd Jan. 1893.	
		Tavanampalle ...	...	...	2,060	...	2,060	...	No. 597 of 13th Dec. 1892.	
		Putalapattu ...	...	...	2,917	...	2,917	...	No. 106 of 24th Feb. 1893.	
	Palmanér ...	Pednaigdrug ...	...	...	12,760	...	12,760	...	No. 524 of 8th Nov. 1892.	
	Gudiyáttam.	Pallelakuppam ...	...	...	6,212	...	6,212	...	No. 108 of 20th Feb. 1893.	
		Paradarami Extension.	...	...	1,900	...	1,900	...	No. 139 of 4th April 1892.	
		Synagunta	...	...	6,400	...	6,400	...	No. 445 of 13th Sept. 1892.	
		Mordana Extension.	...	...	9,598	...	9,598	...	No. 296 of 22nd June 1892.	
		Panamadugu ...	...	...	9,340	...	9,340	...	No. 91 of 29th Feb. 1892.	
	Vellore ...	Attiyur	...	...	4,808	...	4,808	...	No. 238 of 16th May 1892.	
	Poluru ...	Aliyalamangalam ...	...	...	10,027	...	10,027	...	No. 310 of 22nd June 1892.	
	Arcot ...	Solavaram	...	...	1,143	...	1,143	...	No. 118 of 27th Feb. 1892.	
	Walajah	Kolathur	...	...	1,729	...	1,729	...	No. 89 of 5th March 1892.	
		Ammur	...	...	5,982	...	5,982	...	No. 311 of 22nd June 1892.	
	Wandiwash.	Ponnur	...	...	769	...	769	...	No. 327 of 22nd June 1892.	
		Nedungal	...	...	3,580	...	3,580	...	No. 512 of 1st Nov. 1892.	
		Nedunganam ...	...	...	1,697	...	1,697	...	No. 78 of 23rd Feb. 1892.	
		Total ...	328,283	512·94	112,318	...	440,601	688·44		

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
South Arcot.	No. I, Tiruvannámalai.	Annamalai	2,640	...	...	...	2,640	...	.....	
		Chinnasamudram ...	3,769	...	...	...	3,769	...	.....	
		Mudenai	6,464	...	...	...	6,464	...	.....	
		Perungolatur Swamimalai.	9,312	...	...	...	9,312	...	.....	
		Anandavadi ...	8,672	...	...	...	8,672	...	.....	
		Kavuttumalai ...	10,032	...	...	...	10,032	...	.....	
		Tippakadu	4,442	...	...	...	4,442	...	.....	
	No. II, Tindivanam.	Suruvadi	4,608	...	...	...	4,608	...	.....	
		Muttakadu	4,053	...	...	...	4,053	...	.....	
		Karai	1,697	...	...	...	1,697	...	.....	
		Agaram	600	...	...	...	600	...	.....	
		Merkanam	80	...	...	...	80	...	.....	
		Kurumbaram, 2nd Bit.	192	...	...	...	192	...	.....	
		Kumalampatti ...	1,201	...	...	...	1,201	...	.....	
		Sevur	1,200	...	...	...	1,200	...	.....	
		Panchalam	1,120	...	...	...	1,120	...	.....	
		Venmaniyattur ...	486	...	...	...	486	...	.....	
		Peradikuppam ...	729	...	...	...	729	...	.....	
		Akkur	1,350	...	...	...	1,350	...	.....	
		Saram	243	...	...	...	243	...	.....	
		Salavadi	64	...	...	...	64	...	.....	
		Jakkampettai ...	300	...	...	...	300	...	.....	
		Adikuppam	150	...	...	...	150	...	.....	
		Akshikadu	450	...	...	...	450	...	.....	
	No. III, Villupuram.	Gangavaram ...	13,276	...	...	...	13,276	...	.....	
		Nabob's Tope ...	67	...	...	2	65	...	No. 35 of 11th Jan. 1893.	Disafforested.
		Vakkur	384	...	...	...	384	...	.....	
		Vikravándi ...	256	...	...	...	256	...	.....	
		Satanur, 1st Bit ...	204	...	...	...	204	...	.....	
		Narasinganur ...	428	...	...	...	428	...	.....	
		Gundalapuliyur ...	940	...	...	...	940	...	.....	
		Karanai	128	...	...	...	128	...	.....	
		Adanur	1,491	...	...	...	1,491	...	.....	
		Ariyalur	1,036	...	...	...	1,036	...	.....	
		Valudareddi ...	260	...	...	...	260	...	.....	
		Melkondai	480	...	...	...	480	...	.....	
		Sattanur, 2nd Bit ...	320	...	...	...	320	...	.....	
		Turinjikadu ...	853	...	...	...	853	...	.....	
	No. IV, Cuddalore.	Vellakarai	1,568	...	...	...	1,568	...	.....	
		Valudalampattu ...	908	...	...	...	908	...	.....	
		Sammattikuppam ...	364	...	...	...	364	...	.....	
		Marungur	224	...	...	...	224	...	.....	
		Vegakottai	480	...	...	...	480	...	.....	
		Vadakottu	3,084	...	...	...	3,084	...	.....	
		Valudayampattu ...	1,536	...	...	...	1,536	...	.....	
		Kangiruppu, 1st Bit.	2,956	...	...	...	2,956	...	.....	
		Velankuppam ...	1,094	...	...	...	1,094	...	.....	
		Shonankuppam ...	140	...	...	...	140	...	.....	
		Fort St. David ...	44	...	...	...	44	...	.....	
		Talankoda	217	...	...	...	217	...	.....	
		Sillambanadampettai.	780	...	...	...	780	...	.....	
		Nochikadu	640	...	...	...	640	...	.....	
		Peramattur	1,036	...	...	...	1,036	...	.....	
		Kangiruppu, 2nd Bit.	2,519	...	...	...	2,519	...	.....	
	No. V, Tirukkóyilúr.	Velur	1,670	...	...	...	1,670	...	.....	
		Kuttadi	1,700	...	...	...	1,700	...	.....	
	No. I, Tiruvannámalai.	Tenmalai	...	...	50,428	...	50,428	...	No. 323 of 12th July 1892.	
		Pelamarudur ...	...	...	9,148	...	9,148	...		
		Nallattupattu ...	...	...	6,748	...	6,748	...	No. 324 of 12th July 1892.	
	No. II, Tindivanam.	Kurumpuram, 1st Bit	...	...	500	...	500	...	No. 107 of 11th Mar. 1892.	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Central Circle—*cont.*									
	No. III, Villupuram.	Panampattu ...	...	...	600	...	600	...	No. 205 of 11th May 1892.	
		Kappiyampuliyur ...	...	...	660	...	660	...	No. 381 of 13th Aug. 1892.	
		Gangarampalaiyam.	...	...	435	...	435	...	No. 520 of 8th Nov. 1892.	
		Pulanjimalai ...	...	...	600	...	600	...	No. 589 of 12th Dec. 1892.	
	No. IV, Cuddalore.	Ramapuram ...	...	...	1,730	...	1,730	...	No. 346 of 1st Aug. 1892.	
		Doni Durai	...	...	100	...	100	...	No. 516 of 8th Nov. 1892.	
	No. IV, Chidambaram.	Killai	...	....	1,160	...	1,160	...	No. 447 of 13th Sept. 1892.	
		Periyapattu ...	...	...	1,130	...	1,130	..	No. 475 of 5th Oct. 1892.	
		Wallajah	...	...	2,770	...	2,770	...	No. 580 of 28th Nov. 1892.	
		Pichavaram ...	...	...	2,489	...	2,489	...	No. 32 of 16th Jan. 1893.	
South Arcot —*cont.*	No. V, Tirukkoilúr.	Pandur	...	...	955	...	955	...	No. 106 of 11th March 1892.	
		Adukkam	...	...	2,000	...	2,000	...	No. 131 of 21st March 1892.	
		Nattamur, 2nd Bit...	...	...	3,800	...	3,800	...	No. 133 of 22nd March 1892.	
		Do. 1st Bit...	...	...	4,500	...	4,500	...	No. 140 of 8th April 1892.	
		Swamimalai, 2nd Bit	...	...	5,330	...	5,330	...	No. 185 of 6th May 1892.	
		Edakkal	...	...	3,390	...	3,390	...	No. 211 of 10th May 1892.	
		Perichanur	...	...	650	..	650	...	No. 234 of 26th May 1892.	
		Sirupakkam ...	...	...	1,080	...	1,080	...	No. 256 of 10th June 1892.	
		Sidevi	...	..	2,800	...	2,800	...	No. 534 of 16th Dec. 1892.	
		Nayanur	...	...	1,800	...	1,800	...	No. 561 of 25th Nov. 1892.	
		Attipakkam ...	...	...	4,500	...	4,500	...	No. 11 of 13th Dec. 1892.	
		Alwarmalai	...	...	8,800	...	8,800	...	No. 120 of 27th Feb. 1893.	
	No. VI, Kallakurchi.	Kanai	...	...	2,220	...	2,220	...	No. 260 of 10th June 1892.	
		Kottalamalai ...	...	...	2,880	...	2,880	...	No. 293 of 22nd June 1892.	
		Mullapuram ...	...	...	1,025	...	1,025	...	No. 263 of 10th June 1892.	
		Rangappanur ...	...	...	2,200	...	2,200	...	No. 444 of 12th Sept. 1892.	
	No. VII, Vriddhachalam.	Kuppanattam ...	...	...	840	...	840	...	No. 431 of 7th Sept. 1892.	
		Narasingamangalam.	...	...	835	...	835	...	No. 435 of 7th Sept. 1892.	
		Nangur	...	...	1,625	...	1,625	...	No. 455 of 23rd Sept. 1892.	
		Kattumylur ...	...	...	1,587	...	1,587	...	No. 460 of 23rd Sept. 1892.	
		Parur	...	...	2,660	...	2,660	...	No. 563 of 28th Nov. 1892.	
		Kottanur	...	...	3,880	...	3,880	...	No. 596 of 12th Dec. 1892.	
		Veppur	...	...	3,800	...	3,800	...	No. 104 of 13th Feb. 1892.	
		Total ...	104,937	163·96	141,655	2	246,590	385·30		

Area of Reserved Forests, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Central Circle—*cont.*										
Tanjore.	Southern Range.	Block No. 2, Maltottam, Eastern Block.	10	...	...	...	10	...	.....	
		Block No. 3, Maltottam, Western Block.	8	...	...	...	8	...	.....	
		Manakadu	120	...	...	...	120	...	.....	
		Talanayar	2,000	...	...	...	2,000	...	.....	
		Tillaivilagam ...	320	...	...	...	320	...	.....	
		Nadur, No. 2 ...	200	...	...	...	200	...	.....	
		Thatchankurichi ...	320	...	...	...	320	...	.....	
		Veralipatti, North Block.	145	...	...	...	145	...	.....	
		Veralipatti, South Block.	234	...	...	...	234	...	.....	
		Kallupatti	85	...	...	...	85	...	.....	
		Kollangarai... ...	458	...	...	...	458	...	.....	
		Puttur, No. I ...	191	...	...	...	191	...	.....	
		Nadur, No. I ...	1,000	...	...	...	1,000	...	.....	
		Puttur, No. II ...	119	...	...	...	119	...	.....	
	Northern Range.	Northern Casuarina.	350	...	...	...	350	...	.....	
		Southern do.	250	...	...	...	250	...	.....	
		Neidavasal	42	...	...	...	42	...	.....	
		Elantope	17	...	...	...	17	...	.....	
	Southern Range.	Kodiyakadu ...	...	...	4,204	...	4,204	...	No. 188 of 4th May 1892.	
		Edangankottai ...	...	...	194	...	194	...	No. 51 of 27th Jan. 1892.	
		Total ...	5,869	9·17	4,398	...	10,267	16·04		
Trichinopoly.	Trichinopoly.	Tuvakudi	1,438	...	...	...	1,438	...	.....	
	Kulitalai.	Elamanur	117	...	...	...	117	...	.....	
		Pettavoitalai ...	137	...	...	...	137	...	.....	
		Kulitalai	77	...	...	...	77	...	.....	
		Manatattai	45	...	...	...	45	...	.....	
		Lalapet	268	...	...	...	268	...	.....	
		Sittalavoi	160	...	...	...	160	...	.....	
		Kattalai ...	75	...	...	...	75	...	.....	
		Tainimalai	464	...	...	...	464	...	.....	
		Minnakaradu ...	98	...	...	...	98	...	.....	
		Panjantanji ...	1,543	...	...	...	1,543	...	.....	
		Viramalai Hills ...	5,472	...	...	...	5,472	...	.....	
		Poiyapetti do. ...	639	...	...	...	639	...	.....	
		No. I, Shenmalai ...	2,477	...	...	...	2,477	...	.....	
		Pakkiri Karadu ...	65	...	...	...	65	...	.....	
		Puttanatam Range comprising Karumalai, Palamalai and Nedumalai.	705	...	...	...	705	...	.....	
		Surpam Range ...	1,403	...	...	...	1,403	...	.....	
		Mathalamalai ...	465	...	...	...	465	...	.....	
		Maradur	180	...	...	...	180	...	.....	
		Mayanur	50	...	...	...	50	...	.....	
		No. II, Shenmalai ...	1,593	...	...	...	1,593	...	.....	
		Sigam Karadu ...	714	...	...	...	714	...	.....	
		Panjantangi Hill Valley.	286	...	...	...	286	...	.....	
	Musiri ..	Sengattupatti ...	3,000	...	...	...	3,000	...	.....	
		Melur	3,000	...	...	...	3,000	...	.....	
		Kaliammankoil Tittu.	1,500	...	...	...	1,500	...	.....	
		Karuppankadu do.	2,000	...	...	...	2,000	...	.....	
		Kanapadi Kannimar Solai.	2,560	...	...	...	2,560	...	.....	
		Kanapadi Thenparanad.	12,021	...	...	...	12,021	...	.....	
	Perambalúr.	Palamalai	10,000	...	...	...	10,000	...	.....	
		Manalodai	4,000	...	...	...	4,000	...	.....	
		Solamatte	7,000	...	...	...	7,000	...	.....	
		Selaiyur	1,600	...	...	...	1,600	...	.....	
		Puliyur	10,000	...	...	...	10,000	...	.....	
		Semmalai	5,000	...	...	...	5,000	...	.....	
		Sengattur	10,000	...	...	...	10,000	...	.....	

Area of Reserved Forests, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Trichinopoly—*cont.*	Udaiyárpálaiyam.	Adanakurichi ...	250	...	...	...	250	...	.....	
		MalaiganKudiyiruppu	150	...	...	...	150	...	.....	
		Tennamanallur ...	10	...	...	...	10	...	.....	
		Velakkurichi ...	48	...	...	...	48	...	.....	
		Sittidaiyar	53	...	...	...	53	...	.....	
		Pasikkulam ...	100	...	...	...	100	...	.....	
		Periakkurichchi ...	147	...	...	...	147	...	.....	
		Sattambadi	1,000	...	...	...	1,000	...	.....	
		Kolamanikkam ...	236	...	...	...	236	...	.....	
		Vettiyarpattu, Nos. I and II.	620	...	...	...	620	...	.....	
		Aramanaikkurichchi.	91	...	...	...	91	...	.....	
		Sundaresvarapuram.	150	...	...	...	150	...	.....	
		Ambappur	200	...	...	...	200	...	.....	
		Ulliyakkudi ...	196	...	...	...	196	...	.....	
		Alavayi	300	...	...	...	300	...	.....	
		Annangarpettai ...	57	...	...	...	57	...	.....	
		Mudukkalam ...	1,197	...	...	...	1,197	...	.....	
		Periavalayam ...	985	...	...	...	985	...	.....	
		Vilangudi	900	...	...	...	900	...	.....	
		Ayyur	1,400	...	...	...	1,400	...	.....	
		Varappanakurichchi.	190	...	...	...	190	...	.....	
		Sripurandan, Bit No. I.	457	...		...	457	...	.....	
		Kovilur	700	...	...	...	700	...	.....	
		Jayankondasholapuram, No. I.	150	...	...	...	150	...	.....	
		Jayankondasholapuram, No. II.	290	...	...	...	290	...	.....	
		Kanguli	800	...	...	...	800	...	.....	
		Vena Nallur ...	197	...	...	...	197	...	.....	
		Tirukkonam ...	650	...	...	...	650	...	.....	
		Koddukkur ...	92	...	...	...	92	...	.....	
		Kulumur	200	...	...	...	200	...	.....	
	Kulitalai ...	Karuppur Reddiyapatti.	...	...	3,600	...	3,600	...	No. 171 of 27th April 1892.	
	Musiri ...	Vannad Kanapadi ...	...	...	10,000	...	10,000	...	No. 45 of 19th Jan. 1892.	
		Manmalai	...	...	6,000	...	6,000	...	No. 184 of 4th May 1892.	
	Udaiyárpalaiyam.	Karaipakkam ...	...	...	83	...	83	...	No. 122 of 18th Mar. 1892.	
		Tiruvenganur ...	...	...	136	...	136	...	No. 118 of 18th Mar. 1892.	
		Sattambadi... ...	...	...	179	..	179	...	No. 123 of 18th Mar. 1893. No. 401 of 19th Aug. 1892.	
		Total ...	101,968	159·33	19,998	...	121,966	190·57		
Salem ...	Salem ...	Bodamalai	5,600	...	...	...	5,600	...	.....	
		Pillapadi	4,992	...	...	...	4,992	...	.....	
		Atur Ghát	3,142	...	...	...	3,142	...	.....	
		Mallapuram Ghát ...	2,285	...	...	...	2,285	...	.....	
		Nartanchedu ...	2,400	...	...	...	2,400	..	.....	
		Vaniyar	4,512	...	...	...	4,512	...	.....	
		Kutar	3,795	...	...	...	3,795	...	.....	
		Manjavadi Ghát ...	8,461	...	...	...	8,461	...	.....	
		Mallapuram Ghát Extension.	640	...	...	...	640	...	.....	
		Ajjampati	1,920	...	...	...	1,920	...	.....	
		Nartanchedu Extension.	1,088	...	...	...	1,088	...	.....	
		Yerimalai	3,520	...	...	...	3,520	...	.....	
		Kanavoipudur ...	3,200	...	...	...	3,200	...	.....	
		Lokur	5,312	...	...	..	5,312	...	.....	
		Pillapalli Kombai, New.	2,080	...	...	...	2,080	...	.....	
		Atur Ghát Extension.	544	...	...	...	544	...	.....	
		Kanjeri, New ...	4,032	...	...	...	4,032	...	.....	
		Pannikaradu ...	4,832	...	...	...	4,832	...	.....	
		Mallapuram ...	589	...	...	...	589	...	.....	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		CENTRAL CIRCLE—*cont.*								
Salem—*cont.*	Salem—*cont.*	Karuvattuparai ...	1,800	...	...	...	1,800	...	.....	
		Gundakal ...	4,000	...	...	...	4,000	...	.....	
		Vanavasi ...	9,000	...	...	...	9,000	...	.....	
		Manakonda ...	5,500	...	...	...	5,500	...	.....	
		Puliyankidai ...	1,000	...	...	...	1,000	...	.....	
		Mattikottai ...	3,500	...	...	...	3,500	...	.....	
		Punjamadevi ...	2,500	...	...	...	2,500	...	.....	
		Godumalai	7,000	...	...	...	7,000	...	.....	
		Jalluttur	12,000	...	...	...	12,000	...	.....	
		Kanjamalai	4,500	...	...	...	4,500	...	.....	
		Mary Land	400	...	...	...	400	...	.....	
	Atur.	Varagur	2,675	...	...	...	2,675	...	.....	
		Nayakenkombai ...	2,880	...	...	...	2,880	...	.....	
		Bylur	6,880	...	...	...	6,880	...	.....	
		Nagur	3,757	...	...	...	3,757	...	.....	
	Atur and Námakkal.	Karavallikombai ...	8,755	...	...	...	8,755	...	.....	
	Námakkal.	Jambuttu	2,617	...	...	...	2,617	...	.....	
		Puliyanshola ...	5,530	...	...	...	5,530	...	.....	
	Úttankarai.	Pallipatti	8,000	...	...	...	8,000	...	.....	
		Thambakal	7,757	...	...	...	7,757	...	.....	
		Chitteri	3,917	...	...	...	3,917	...	.....	
		Chittilingi	6,880	...	...	...	6,880	...	.....	
		Kottapatti	8,960	...	...	...	8,960	...	.....	
		Puvampatti	4,672	...	...	...	4,672	...	.....	
		Ammapalaiyam ...	9,216	...	...	...	9,216	...	.....	
		Singarapet	2,624	...	...	...	2,624	...	.....	
		Mallapuram Extension.	400	...	...	...	400	...	.....	
	Tiruppattúr.	Mangalam	6,080	...	...	...	6,080	...	.....	
		Nagaluttur	2,560	...	...	...	2,560	...	.....	
		Mambakam ...	9,370	...	...	...	9,370	...	.....	
		Pungolam	7,834	...	...	...	7,834	...	.....	
		Mudukaddappu ...	2,048	...	...	...	2,048	...	.....	
		Jalárpet	1,216	...	...	...	1,216	...	.....	
		Narasingapuram ...	2,048	...	...	...	2,048	...	.....	
		Kolarpatti ...	2,016	...	...	...	2,016	...	.....	
		Alangayam ...	11,520	...	...	...	11,520	...	.....	
	Tiruppattúr and Úttankarai.	Singarapet Extension.	7,398	...	...	...	7,398	...	.....	
	Tiruppattúr & Krishnagiri.	Kotur	3,840	...	...	...	3,840	...	.....	
	Hosúr ...	Ayyur	5,952	...	...	...	5,952	...	.....	
		Marandahalle ..	5,824	...	...	...	5,824	...	.....	
		Gulhutti, New ...	7,942	...	...	...	7,942	...	.....	
		Manchi, New ..	5,632	...	...	...	5,632	...	.....	
		Jowlagiri	6,016	...	...	...	6,016	...	.....	
		Talle	6,368	...	...	...	6,368	..	...	
		Naganur	3,200	...	...	...	3,200	...	.....	
		Denkanikota ...	2,816	...	...	...	2,816	...	.....	
		Toluvabetta ...	6,919	...	...	...	6,919	...	.....	
		Anchetti	8,832	...	...	...	8,832	...	.....	
		Natrapalaiyam ...	10,880	...	...	...	10,880	...	.....	
		Biligundla	14,272	...	...	...	14,272	...	.....	
		Kestur	11,616	...	...	...	11,616	...	.....	
		Bilikal	11,136	...	...	...	11,136	...	.....	
		Mallahalli	8,928	...	...	...	8,928	...	.....	
		Taggatti	10,432	...	...	...	10,432	..	.....	
	Dharmapuri.	Pennagaram ...	10,304	...	...	...	10,304	...	.....	
		Morappur	16,640	...	...	...	16,640	...	.....	
		Bianurmalai ...	11,500	...	...	...	11,500	...	.....	
		Masakal	9,600	...	...	...	9,600	...	.....	
		Perumbalaimalai ...	12,000	...	...	...	12,000	...	.....	
	Hosúr and Dharmapuri.	Wooddapatti ...	17,152	...	...	...	17,152	...	.....	
		Gutirayen	15,776	...	...	...	15,776	...	.....	
	Krishnagiri.	Burgur, New ...	1,920	...	...	...	1,920	...	.....	
		Togarapalli	900	...	...	...	900	...	.....	
	Tiruchengód.	Pakkanad	4,500	...	...	...	4,500	...	.....	
		Suriyamalai ...	4,650	...	...	...	4,650	...	.....	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Salem—*cont.*	Krishnagiri.	Neralkotta	...	...	7,140	...	7,140	...	No. 30 of 16th Jan. 1893.	
	Salem ...	Ramaswamimalai ...	...	...	3,000	...	3,000	...	No. 404 of 18th Aug. 1892.	
		Arasankad	...	...	2,500	...	2,500	...	No. 92 of 29th Feb. 1892.	
		Kappathu	...	...	3,500	...	3,500	...	No. 510 of 2nd Nov. 1892.	
		Puduppatti	...	...	7,500	...	7,500	...	No. 90 of 5th Mar. 1892.	
		Sanyasimalai ...	...	...	539	...	539	...	No. 54 of 27th Jan. 1892.	
	Dharmapuri.	Thoppur	...	...	7,000	...	7,000	...	No. 121 of 15th Mar. 1892.	
		Kesaraguli	...	...	6,400	...	6,400	...	No. 300 of 22nd June 1892.	
		Picklymalai ...	...	...	6,400	...	6,400	...	No. 261 of 30th May 1892.	
		Bathanavadi ...	...	...	27,000	...	27,000	...	No. 398 of 22nd Aug. 1892.	
	Salem ...	Kudimaduvu ...	...	...	4,307	...	4,307	...	No. 366 of 3rd Aug. 1892.	
	Atur ...	Varagur Extension ...	...	...	486	...	486	...	No. 254 of 1st June 1892.	
	Uttankarai.	Thombakal Extension.	...	...	3,840	...	3,840	...	No. 265 of 30th May 1892.	
		Nochikuttai ...	...	...	7,917	...	7,917	...	No. 397 of 22nd Aug. 1892.	
		Kalnad	...	...	4,320	...	4,320	...	No. 202 of 10th May 1892.	
		Chitteri Extension...	...	...	2,880	...	2,880	...	No. 255 of 1st June 1892.	
		Veppamputti ...	...	...	8,640	...	8,640	...	No. 242 of 26th May 1892.	
		Thirthamalai ...	...	...	11,046	...	11,046	...	No. 519 of 7th Nov. 1892.	
	Uttankarai and Tirupattúr.	Govindapuram ...	...	...	2,700	...	2,700	...	No. 402 of 22nd Aug. 1892.	
	Hosúr ...	Galigattam	...	...	6,080	...	6,080	...	No. 279 of 13th June 1892.	
		Kestur Extension ...	...	...	3,600	...	3,600	...	No. 280 of 13th June 1892.	
		Thalli Extension ...	...	...	4,320	...	4,320	...	No. 547 of 25th Nov. 1892.	
		Total ...	487,301	761·41	131,115	...	618,416	966·28		
		Total of the Circle ...	1,555,257	2,430·09	817,140	2	2,372,395	3,706·87		
	Southern Circle.									
Madura.	I or Cumbum Valley.	*Cumbum Valley, East.*								
		Block No. 1, Kuttinachiar.	640	...	...	...	640	...	.....	
		Block No. 2, Surulipatti.	5,760	...	...	...	5,760	..	.....	
		Block No. 3, Pandaratorai.	300	...	...	...	300	...	.....	
		Block No. 4, Vannatiparai.	27,520	...	...	...	27,520	...	.....	
		Block No. 5, Melagudalur.	1,280	...	...	...	1,280	...	.....	
		Cumbum Valley, West.								
		Block No. 1, Suranganur.	3,616	...	...	...	3,616	...	.....	
		Block No. 2, Matchakal.	2,560	...	...	...	2,560	...	.....	
		Tambirankanal ...	256	...	...	...	256	...	.....	
		Vikkramangalam ...	3,789	...	...	...	3,789	...	.....	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Southern Circle—*cont.*										
Madura —*cont.*	II or Kodaikánal.	*Palni Hills, Southern Slopes, West.*								
		Block No. 1, Amburivi.	6,400	...	...	...	6,400	...	.....	
		Block No. 2, Sengalvariar.	4,609	...	...	...	4,609	...	.....	
		Block No. 3, Karungaldhonimedu.	1,920	...	...	...	1,920	...	.....	
		Block No. 4, Pambar.	4,243	...	...	...	4,243	...	.....	
		Block No. 5, Adukkam.	3,200	...	...	...	3,200	...	.....	
		Murugamalai ...	6,572	...	...	...	6,572	...	.....	
		Palni Hills, Southern Slopes, East.								
		Block No. 1, Marudanadiar.	6,528	...	...	...	6,528	...	.....	
		Block No. 2, Kadugatadi.	1,280	...	...	...	1,280	...	.....	
		Block No. 3, Arunkanal.	1,920	...	...	...	1,920	...	.....	
		Block No. 4, Arunkanalshola.	32	...	...	...	32	...	.....	
		Block No. 5, Southern Slopes.	25,600	...	...	...	25,600	...	.....	
		Block No. 6, Unjalanchi.	256	..	...	...	256	...	.....	
	Tandigudi.	Varatharkanal ..	160	..	...	...	160	...	.....	
		Iruttarkanal ...	100	...	...	...	100	...	.....	
		Pambukkalár ...	800	...	...	...	800	...	.....	
		Kokkuparai ...	320	...	...	...	320	...	.....	
		Palni Hills, Northern Slopes, East.								
		Block No. 1, Siruvattukadu.	2,279	...	...	...	2,279	...	.....	
		Block No. 2, Northern Slopes.	12,800	...	...	...	12,800	...	.....	
		Block No. 3, Vennilai.	4,800	...	...	...	4,800	...	.....	
		Block No. 4, Kanienkadu.	3,002	...	...	...	3,002	...	.....	
		Block No. 5, Norchiarkad.	200	...	...	...	200	...	.....	
		Block No. 6, Talaiaranadarkovilkad.	30	...	...	...	30	...	.....	
		Palni Hills, Northern Slopes, West.								
		Block No. 1, Pumbarai Vilpatti Valley.	13,587	...	...	...	13,587	...	.....	
		Block No. 2, Velankombai.	1,600	...	...	...	1,600	...	.....	
		Block No. 3, Velankombai Plantation.	54	...	...	...	54	...	.....	
		Block No. 4, Olianathuodai.	3,200	...	...	...	3,200	...	.....	
		Block No. 5, Kukkal.	9,645	...	...	...	9,645	..	.....	
	Kodaikánal.	Block No. 6, Kudriyar.	10,061	...	...	...	10,061	...	.....	
		Perumalmalai.								
		Block No. 1, Perumalmalai.								
		Block No. 2, Thogavarai Shola.	7,386	...	...	...	7,386	...	.....	
		Block No. 3, Talaiarkadu.								
		Block No. 4, Kadamaravu.								

Area of Reserved Forests, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Southern Circle—*cont.*									
Madura—*cont.*	Tandigudi.	*Kallar.*								
		Block No. 1, Kallar.	9,600	...	...	...	9,600	...	.....	
		Block No. 2, Ariyanuttukanal.	64	...	...	...	64	...	.....	
		Block No. 3, Kumangovaimalaikad.	80	...	...	...	80	...	.....	
		Lower Palni Sholas.								
		Block No. 1, Kadavu	64	...	...	...	64	...	.....	
		Block No. 2, Petrankanal.	80	...	...	...	80	...	.....	
	Kodaikánal	*Upper Palni Sholas.*								
		Block No. 1, Perumalmalai.	2,316	...	...	...	2,316	...	.....	
		Block No. 2, Serathankanal.								
		Block No. 3, Tiger Shola.								
		Block No. 4, Kodaikánal.								
		Block No. 5, Gundan and Manavan.								
		Block No. 6, Parappar.								
		Block No. 7, Pannitulam.								
		Block No. 8, Gunden.								
		Block No. 9, Sandanam.								
		Block No. 10, Fort Hamilton.								
		Block No. 11, Mariyan.								
		Upper Palni Plantation.								
		Block No. 1, Gundan Shola (*a*).	288	...	47	...	335	...	No. 142 of 17th Mar. 1893.	
		Block No. 2, Gundan Shola (*b*).								
		Block No. 3, Post Office.								
		Block No. 4, Poombarai.								
		Perumalai ...	9,600	...	...	...	9,600	...	.....	
		Budagudimalai ...	1,120	...	...	...	1,120	...	.....	
		Poolamalai	800	...	...	...	800	...	.....	
	III or Kanavoipatti.	*Kanavoipatti.*								
		Block No. 1, Karandamalai.	22,077	...	...	...	22,077	...	.....	
		Block No. 2, Kuppuravallikutta.	845	...	...	...	845	...	.....	
		Block No. 3, Akkamakaradu.	301	...	...	...	301	...	.....	
		Block No. 4, Tenkal.	589	...	...	...	589	...	.....	
		Mudimalai	4,435	...	...	...	4,435	...	.....	
		Aiyalur.								
		Block No. 1, Pilliyarnattam.	5,485	...	...	...	5,485	...	.....	
		Block No. 2, Panjantangi.	7,423	...	...	...	7,423	...	.....	
		Block No. 3, Tannirkaradu.	966	...	...	...	966	...	.....	
		Block No. 4, Sundamalai.	410	...	...	...	410	...	.....	

Area of Reserved Forests, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Southern Circle—*cont.*									
Madura —*cont.*	IV or Palamedu Range.	Sengattampatti ...	1,600	...	...	...	1,600	...	.....	
		Kaduvakurichi ...	3,200	...	...	...	3,200	...	.....	
		Sirumalai.								
		Block No. 1, Sirumalai	21,786	...	...	...	21,786	...	.....	
		Block No. 2, Kachchakatti.	1,745	...	...	...	1,745	...	.....	
		Alagar Hill.								
		Block No. 1, Alagar Hill.	16,838	...	...	...	16,838	...	.....	
		Sembulimalai ...	1,600	...	...	...	1,600	...	.....	
		Mottamalai	800	...	...	...	800	...	.....	
		Waguttumalai ...	6,089	...	...	...	6,089	...	.....	
		Cumbum Valley, East.								
	I. Cumbum.	VIII. Puvathukaradu	...	...	1,024	...	1,024	...	No. 148 of 20th Mar. 1893.	
		IX. Boothakaradu.	...	...	934	...	934	...	No. 603 of 12th Dec. 1892.	
		Cumbum Valley, West.								
	No. IV Palamedu.	III. Combai ...	...	...	3,840	...	3,840	...	No. 517 of 11th Nov. 1892.	
		II. Kiluvamalai ...	...	...	2,000	...	2,000	...	No. 46 of 22nd Jan. 1892.	
		Total ...	298,506	466·41	7,845	...	306,351	478·67		
Tinnevelly.	Nángunéri	Reserve No. I ...	31,533	...	...	(*a*) 2,740	28,793	...	.....	
		Teak Tract	284	...	...	...	284	...	.....	
		Block No. I, (*a*) ...	25,999	...	...	(*a*) 3,676	22,323	...	.....	
	Ambásamudram.	Reserve No. II ...	91,008	...	...	(*a*) 23,476	67,532	...	.....	
		Mullimalai	457	...	...	...	457	...	.....	
		Kaliyammankoilpara	309	...	...	...	309	...	.....	
		Koviladparai ...	124	...	...	...	124	...	.....	
		Saluparpathai ...	71	...	...	...	71	...	.....	
		Block No. II, (*a*), (*b*)...	53,819	...	...	(*a*) 31,093	22,726	...	.....	
		Kolundamamalai ...	1,540	...	...	...	1,540	...	.....	
	Tenkási.	Reserve No. III ..	18,010	...	...	(*a*) 436	17,574	...	.....	
		Okaninranpathai ...	85	...	...	...	85	...	.....	
		Kavelkattiparambu.	374	...	...	...	374	...	.....	
		Kottamalai	860	...	...	...	860	...	.....	
		Nalankurichi ...	212	...	...	...	212	...	.....	
		Chinnakadu as defined in Mr. Baber's decision on claims of Inamdar.	2,560	...	...	(*a*) 1,172	1,388	...	.....	
		Block III, a, b, c, d.	10,643	...	...	(*a*) 7,127	3,516	...	.....	
	Sankaranayinárkóyil.	Reserve No. IV ...	19,738	...	...	(*a*) 3,700	16,038	...	.....	
		Chunnambuparambu	286	...	...	...	286	...	.....	
		Block No. IV (*a*) ...	30,714	...	...	(*a*) 20,218	10,496	...	.....	
		Sayamalai ..	294	...	...	...	294	...	.....	
	Srívilliputtúr.	Reserve No. V. ..	23,270	...	...	(*a*) 8,474	14,796	...	.....	
		Unnipattimalai ...	530	...	(*a*) 20	...	550	...	.....	
		Sappaniparambu ...	376	...	(*a*) 8	...	384	...	.....	
		Pulpattuparambu ...	51	...	..	...	51	...	.....	
		Martandamparai ...	135	...	...	...	135	...	.....	
		Kottankulam ...	473	...	(*a*) 77	...	550	...	.....	
		Block V (*a*)	39,874	...	...	(*a*) 11,702	28,172	...	.....	
		Valaikulamparambu.	1,120	...	(*a*) 25	..	1,145	...	.....	
	Tinnevelly	Talaiyutu	890	...	...	...	890	...	.....	
		Sivalaperi	213	...	...	...	213	...	.....	
	Tenkarai.	Pannamparai ...	117	...	...	..	117	...	.....	
		Kaliyavur	158	...	...	...	158	...	.....	
		Kottamadakikadu ...	1,279	...	...	...	1,279	...	.....	
		Kongarayakurichi ...	60	...	...	...	60	...	.....	
		Vallanad Hills ...	4,666	...	...	(*b*) 7	4,659	...	.....	

(*a*) Due to India survey map measurements. (*b*) Correction of area.

Area of Reserved Forests, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		SOUTHERN CIRCLE—*cont.*								
Tinnevelly —*cont.*	Ottapidáram.	Virusampatti ...	294	...	...	..	294	...		
		Milavittan	709	...	...	...	709	...		
	Tenkarai ...	Kudiraimoli Teri ...	...	...	13,393	...	13,393	...	No. 309 of 21st June 1892.	
		Total ...	363,135	567·40	13,523	113,821	262,837	410·68		
	Satyamangalam.	Gairmallam ...	520	...	...	...	520	...	.....	
		Vellamundi ...	12,800	...	...	...	12,800	...	.....	
	Talamalai.	Eastern slopes of Nilgiris.	60,800	...	...	...	60,800	...	.....	
		Talamalai	121,600	...	...	...	121,600	...	.....	
	Kollegal.	Chikkailuru ...	53,760	...	...	...	53,760	...	.....	
		Doddasampagai ...	60,800	...	...	...	60,800	...	.....	
North Coimbatore.		Sennakkalpalayam, 2nd Bit.	...	...	102	...	102	...	No. 325 of 8th July 1892.	
		Sivamalai	...	...	93	...	93	...	No. 345 of 27th July 1892.	
		Undorappatti, 1st Bit	...	...	117	...	117	...		
		Do. 2nd Bit	...	...	148	...	148	...		
		Settipalayam ...	...	...	95	...	95	...	No. 349 of 1st Aug. 1892.	
		Tattanmedu ...	...	...	80	...	80	...		
		Yethilamalai ...	...	...	65	...	65	...		
		Semmadaiparai ...	...	...	36	...	36	...		
		Iyempalayam ...	...	...	116	...	116	...		
		Punjaithalaiyur ...	...	...	58	...	58	...		
		Ganapathipalayam.	...	...	80	...	80	...	No. 350 of 1st Aug. 1892.	
		Selambampalayam...	...	...	164	...	164	...	No. 351 of 1st Aug. 1892.	
		Kongayampalayam.	...	...	177	...	177	...	No. 363 of 11th Aug. 1892.	
		Akkarapalayam, 1st Bit.	...	...	64	...	64	...	No. 399 of 18th Aug. 1892.	
		Akkarapalayam, 2nd Bit.	...	...	87	...	87	...		
		Manakadavu ...	...	...	323	...	323	...	No. 432 of 7th Sept. 1892.	
		Nadukandamedu ...	...	...	218	...	218	...	No. 488 of 7th Oct. 1892.	
		Pullakalipalayam ...	...	...	66	...	66	...	No. 486 of 12th Oct. 1892.	
		Kullakalipalayam ...	...	...	87	...	87	...	No. 575 of 7th Dec. 1892.	
	Erode ...	Vellakovil	...	...	55	...	55	...	No. 497 of 17th Oct. 1892.	
		Ponnapuram, 1st Bit	...	...	272	...	272	...	No. 577 of 28th Nov. 1892.	
		Do. 2nd Bit	...	...	179	...	179	...		
		Kannimarkovil ...	...	...	84	...	84	...	No. 10 of 22nd Dec. 1892.	
		Pudur	...	...	70	...	70	...	No. 20 of 9th Jan. 1893.	
		Attamalai	...	...	646	...	646	...	No. 15 of 10th Jan. 1893.	
		Manmedu	...	...	183	...	183	...	No. 130 of 6th Mar. 1893.	
		Ganapathy	...	...	427	...	427	...	No. 133 of 6th Mar. 1893.	
		Pulikalkaradu ...	...	...	419	...	419	...	No. 134 of 6th Mar. 1893.	
		Tholaithupatti ...	...	...	59	...	59	...	No. 169 of 27th April 1892.	
		Punjakalkurichi ...	...	...	81	...	81	...		
		Inanganur	...	...	212	...	212	...		
		Komarapalayam ...	...	...	112	...	112	...		
		Kakkavadi Pichampatty.	...	...	179	...	179	...		
		Tottiyavady ...	...	...	193	...	193	...	No. 302 of 22nd June 1892.	
		Modakkur	...	...	118	...	118	...		
		Nerur	...	...	131	...	131	...		
		Karavalli	...	...	65	...	65	...	No. 320 of 9th July 1892.	
		Thalapatti	...	...	157	...	157	...	No. 521 of 7th Nov. 1892.	
		Vandanmalai Rangamalai.	...	...	1,708	...	1,708	...	No. 573 of 6th Dec. 1892.	
		Total ...	310,280	484·81	7,526	...	317,806	496·57		

Area of Reserved Forests, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		SOUTHERN CIRCLE—*cont.*								
South Coimbatore.	No. 1, Tunacadavu and No. 2, Pollachi.	Anamalais No. 1 ...	52,480	...	...	...	52,480	...	.....	
	No. 2, Pollachi.	Do. No. 2 ...	3,140	...	...	...	3,140	...	.....	
	No. IV, Udamalpet.	Do. No. 3 ...	47,360	...	...	...	47,360	...	.....	
	No. II, Pollachi and Udamalpet.	Do. No. 3 ...	133,120	...	...	...	133,120	...	.....	
	No. VII, Bolampatti, and No. VIII, Sholakarai.	Bolampatti Block No. I.	47,680	...	...	...	47,680	...	.....	
	No. VII, Bolampatti.	Bolampatti Block No. II.								
		Bolampatti Block No. III.								
		Tadagam No. IV ...	30,720	...	...	...	30,720	...	.....	
	No. VI, Méttupálaiyam.	Gopanari V	38,200	...	...	...	38,200	...	.....	
		Kempampalaiyam VI								
		Nellitorai VII ...								
		Odanthorai VIII ...	5,880	...	...	...	5,880	...	.....	
		Modur IX	3,600	...	...	...	3,600	...	.....	
	No. VIII, Sholakarai.	Small Sholakarai Reserve.	81	...	...	...	81	...	.....	
		Total ...	362,261	566·03	...	...	362,261	566·03	.....	
Nilgiris.	Mudumalai.	Benne	11,068	...	...	...	11,068	...	.....	
		Gadsbrook	230	...	...	...	230	...	.....	
		Cherambadi ...	1,983	...	...	...	1,983	..	.....	
		Ammankaval ...	563	...	...	...	563	...	.....	
	Sigur ...	Kalhatti Slopes ...	8,983	...	...	...	8,983	...	.....	
		Ebanad	571	...	...	...	571	...	.....	
		Moyar	13,580	...	...	...	13,580	...	.....	
		Northern Hay ...	3,998	...	...	...	3,998	...	.....	
		Naduvattam ...	3,411	...	...	...	3,411	...	.....	
	Ootacamund.	Marliamund Plantation.	17	...	...	...	17	...	.....	
		Aramby	430	...	...	...	430	...	.....	
		Marliamund ...	194	...	...	...	194	...	.....	
		Cairn Hill	559	...	...	...	559	...	.....	
		Brooklands	177	...	...	...	177	...	.....	
		Lovedale	296	...	...	...	296	...	.....	
		Craigmore	299	...	...	...	299	...	.....	
		Dodabetta ...	991	...	...	...	991	...	.....	
		Snowdon	1,053	...	...	...	1,053	...	.....	
		Jakuntha	373	...	...	...	373	...	.....	
		Muthanad	420	...	...	...	420	...	.....	
		Governor's Shola ...	2,671	...	...	...	2,671	...	.....	
		Pykara	1,309	...	...	...	1,309	...	.....	
		Sandynullah ...	818	...	...	...	818	...	.....	
		Kengodu	451	...	...	...	451	...	.....	
		Karpakan	391	...	...	...	391	...	.....	
		Nadiwattam Sholas	1,501	...	...	...	1,501	...	.....	
		Vellingiri	643	...	...	...	643	...	.....	
		Kadcoopa	1,622	...	...	...	1,622	...	.....	
		Mukurti	8,953	...	...	...	8,953	...	.....	
		Kundahs	40,521	...	...	142	40,379	...	No. 564 of 16th Nov. 1892.	Disafforested.
		Mikkeru	1,267	...	...	...	1,267	...	.....	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Southern Circle—*cont.*										
Nilgiris—*cont.*	Ootacamund—*cont.*	Thia Shola	1,551	...	...	...	1,551	...	.....	
		Hiriya Shigi ...	2,175	...	...	...	2,175	...	.....	
		Devamalai	229	...	...	...	229	...	.....	
		Honnathalai ...	320	...	...	...	320	...	.....	
		Fern Hill Shola ...	10	...	...	...	10	...	.....	
		Addition to Fair Lawn's Block I.	22	...	...	...	22	...	.....	
		Addition to Dodabetta No. II.	13	...	...	...	13	...	.....	
		Additionto Dodahalla	10	...	...	...	10	...	.....	
		Bilikal Road ...	25	...	...	...	25	...	.....	
		Hulikal ...	6,411	...	...	...	6,411	...	.....	
		Rallia ...	189	...	...	...	189	...	.....	
		Black Bridge ...	390	...	...	...	390	...	.....	
		Coonoor Peak ...	540	...	...	...	540	...	.....	
		Lamb's Rock ...	708	...	...	...	708	...	.....	
		Tiger Hill ...	328	...	...	...	328	...	.....	
		Ghât Reserve ...	311	...	...	2	309	...	No. 36 of 14th Jan. 1893.	Disafforested.
		Hill Grove	187	...	...	...	187	...	.....	
		Kullar	1,815	...	...	...	1,815	...	.....	
		Kóttagiri	563	...	...	...	563	...	.....	
		Ithalar	460	...	...	...	460	...	.....	
		Deva Shola	215	...	...	...	215	...	.....	
		Balakola	935	...	...	...	935	...	.....	
		Athigaratti ...	34	...	...	...	34	...	.....	
		Sutton Shola ...	52	...	...	...	52	...	.....	
		Commandu	993	...	...	...	993	...	.....	
		Pembroke	122	...	...	...	122	...	.....	
		Nedukaduhulla ...	885	...	...	...	885	...	.....	
		Bettumund, South.	137	...	...	...	137	...	.....	
		Little Ralliah ...	29	...	...	...	29	...	.....	
		Rallah Shola ...	30	...	...	...	30	...	.....	
		Halakaray ...	172	...	...	...	172	...	.....	
		Billithitu ...	35	...	...	...	35	...	.....	
		Dolphin ...	65	...	...	...	65	...	.....	
		Guernsey ...	14	...	...	...	14	...	.....	
		Kodamalai ...	15	...	...	...	15	...	.....	
		St. Catherine's Fall.	124	...	...	...	124	...	.....	
		Constantia ...	35	...	...	...	35	...	.....	
	Coonoor.	Tuttapoliam ...	54	...	...	...	54	...	.....	
		Gudakalhalla ...	299	...	...	...	299	...	.....	
		Bettu Nos. 1 and 2.	29	...	...	...	29	...	.....	
		Kunnavara addition.	98	...	...	...	98	...	.....	
		Kanavath ...	16	...	...	...	16	...	.....	
		Deepdale ...	361	...	...	...	361	...	.....	
		Gudakal	600	...	...	...	600	...	.....	
		Clyffe ...	33	...	...	...	33	...	.....	
		Dodabetta, I and II.	105	...	...	...	105	...	.....	
		Shamrock	43	...	...	...	43	...	.....	
		Bikkehatti	19	...	...	...	19	...	.....	
		Ittakal, Nos. 1 and 2.	21	...	...	...	21	...	.....	
		Mavada	211	...	...	...	211	...	.....	
		Kuttada Nos. 1 and 2.	29	...	...	...	29	...	.....	
		Sundatti	124	...	...	...	124	...	.....	
		Kunshola	159	...	...	...	159	...	.....	
		Kirkanara, Nos. 1 and 2.	24	...	...	...	24	...	.....	
		Kilatti	17	...	...	...	17	...	.....	
		Hadumund	48	...	...	...	48	...	.....	
		Uppatti	53	...	...	...	53	...	.....	
		Doddakava	62	...	...	...	62	...	.....	
		Ullavanadmund Shola.	57	...	...	...	57	...	.....	
		Sinnattu Shola ...	51	...	...	...	51	...	.....	
		Longwood Reserve additon.	31	...	...	...	31	...	.....	
		Kullar addition I and II.	72	...	...	...	72	...	.....	
		Benhope No. 2 ..	34	...	...	...	34	...	.....	
		Kallur	388	...	...	...	388	...	.....	

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Southern Circle—*cont.*										
Nilgiris—*cont.*	Ootacamund.	Red Hills	...	...	48	...	48	...	No. 30 of 15th Jan. 1892.	
		Keradamund ...	...	...	276	...	276	...	No. 66 of 13th Feb. 1892.	
		Bigali Halla ...	...	...	46	...	46	...	No. 28 of 15th Jan. 1892.	
		Yedakot	...	...	117	...	117	...	No. 29 of 15th Jan. 1892.	
		Honnathalai, South.	...	...	214	...	214	...	No. 152 of 12th April 1892.	
		Rallia	...	...	382	...	382	...	No. 81 of 23rd Feb. 1892.	
		Teppakuchi ...	...	...	115	...	115	...	No. 130 of 21st Mar. 1892.	
		Naduhatti	...	...	476	...	476	...	No. 79 of 23rd Feb. 1892.	
		Yerkaudhalla ...	...	...	18	...	18	...	Nos. 113 & 114 of 15th Mar. 1892.	
		Konakarai	...	...	1,864	...	1,864	...	No. 152 of 12th April 1892.	
	Coonoor.	Vagapanai	...	...	2,648	...	2,648	...	Do.	
		Denad	...	...	2,073	...	2,073	...		
		Madanad	...	...	723	...	723	...		
		Kodanad Valley ...	...	...	294	...	294	...		
		Nedugula	...	...	89	...	89	...		
		Longwood addition No. II.	...	...	31	...	31	...	Do.	
		Jakanare slopes ...	...	...	6,419	...	6,419	...	Do.	
		Pakasuramalai ...	...	...	625	...	625	...	No. 348 of 1st Aug. 1892.	
		Pilloor shola ...	...	...	39	...	39	...	No. 348 of 1st Aug. 1892.	
		Kuleer	...	...	226	...	226	...	No. 7 of 19th Dec. 1892.	
		Sutton shola addition.	...	...	38	...	38	...	No. 355 of 29th July 1892.	
		Thaimalai shola ...	...	...	50	...	50	...	No. 203 of 10th May 1892.	
		Tudor shola ...	...	...	24	...	24	...	No. 198 of 10th May 1892.	
		Osatti	...	...	152	...	152	...	No. 337 of 23rd July 1892.	
		Commandoo Reserve addition.	...	...	32	...	32	...	No. 354 of 3rd Aug. 1892.	
		Rallia Reserve addition.	...	...	3	...	3	...	No. 565 of 28th Nov. 1892.	
		Teppakuchi addition.	...	...	4	...	4	...	No. 428 of 7th Sept. 1892.	
		Total ...	132,530	207·08	17,026	144	149,412	233·46	.....	
North Malabar.	Chedleth Reserved Forest.	Kuppadi	7,337	...	...	...	7,337	...	.....	
		Kurchiyat	18,054	...	...	...	18,054	...	.....	
		Rampur	18,855	...	...	...	18,855	...	.....	
	Trans-Beni	Nulpoya	3,613	...	...	...	3,613	...	.....	
		Mavinhulla	12,577	...	...	...	12,577	...	.....	
	Kudrakote and Padri.	Begur	15,366	...	...	...	15,366	...	.....	
		Adavankunnu ...	39	...	...	...	39	...	.....	
		Kudrokote	...	...	20,240	...	20,240	...	No. 559 of 24th Nov. 1892.	
		Total ...	75,841	118·51	20,240	...	96,081	150·13	.....	
South Malabar.	Nilambúr.	Amarampalem ...	468	...	6	...	(*a*) 474	...	.....	
		Chathambarai ...	700	...	...	...	700	...	.....	
	Amarampalam.	Karimpoya Reserve.	3,955	...	...	...	3,955	...	.....	
		Nellikutta do. ...	1,824	...	...	...	1,824	...	.....	
	Palghat.	Walayar do. ...	3,017	...	...	...	3,017	...	.....	
		Chenat Nair do. ...	15,203	...	...	...	15,203	...	.....	
		Total ...	25,167	39·32	6	...	25,173	39·33	.....	

(*a*) By rectification of area.

Area of Reserved Forests, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Southern Circle—*cont.*									
South Canara.	Coondapoor.	No. I, Sabladi ...	208	...	...	...	208	...	.....	
	Udipi.	„ II, Ajjarkadu.	160	...	...	...	160	...	.....	
		„ III, Pilarkhan.	320	...	...	...	320	...	.....	
		„ VIII, Chinkramalle.	2,560	...	...	...	2,560	...	.....	
		„ VI, Manajekadu.	423	...	...	...	423	...	.....	
		„ XIV, Durgamalai	1,601	...	...	...	1,601	...	.....	
		„ XV, Andar Reserve.	22,334	...	...	...	22,334	...	.....	
		„ VII, Tenkahola.	2,039	...	...	...	2,039	...	.....	
	Mangalore.	„ VI, Chembugudde.	75	...	...	...	75	...	.....	
		„ VII, Kutiyar ...	25	...	...	...	25	...	.....	
		Nos. V and IV, Poitaji and Kayarpalle.	96	...	...	...	96	...	.....	
		No. V, Ullal Casuarina and Honne.	57	..	...	...	57	...	.....	
		„ X, Tannirbhavi.	70	...	...	...	70	...	.....	
		„ XII, Hosabettu Reserve.	376	...	...	...	376	...	.....	
		„ XI, Todar Reserve.	458	...	...	...	458	...	.....	
		„ XIII, Unjimale ..	3,200	..	...	...	3,200	...	.....	
	Uppinangadi.	„ I, The Shiradi Sisla Reserve.	19,200	...	...	...	19,200	...	.....	
		„ IV, The Bhagimalai.	6,400	...	...	...	6,400	...	.....	
	Coondapoor.	Kasankatte ...	...	...	262	...	262	...	No. 560 of 28th Nov. 1892.	
		Harkur	...	...	858	...	858	...	No. 16 of 10th Jan. 1893.	
		Jennal Ane ...	...	...	657	...	657	...	No. 150 of 20th March 1893.	
	Kasaragod.	Parappa	...	...	2,560	...	2,560	...	No. 132 of 21st March 1892.	
		Total ...	59,602	93·13	4,337	...	63,939	99·91	.....	
		Total of the Circle ...	1,627,322	2,542·69	70,503	113,965	1,583,860	2,474·78	.....	
	Grand Total of the three Circles.		4,591,920	7,174·87	1,562,400	115,597	6,038,723	9,435·50	.....	

Abstract.

District.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
Northern Circle.						
Ganjám	72,756	113·68	...	...	72,756	113·68
Vizagapatam	8,960	14	6,449	...	15,409	24·08
Gódávari	267,668	418·23	15,130	...	282,798	441·87
Kistna	289,307	452·04	117,467	1,630	405,144	633·04
Anantapur	19,944	31·16	44,678	...	64,622	100·97
Bellary	66,906	104·54	69,789	...	136,695	213·58
Kurnool	683,800	1,068·44	421,244	...	1,105,044	1,726·63
Total ...	1,409,341	2,202·09	674,757	1,630	2,082,468	3,253·85
Central Circle.						
Nellore	168,124	262·69	49,710	...	217,834	340·37
Cuddapah	265,171	414·33	352,603	...	617,774	965·27
Chingleput	93,604	146·26	5,343	...	98,947	154·60
North Arcot	328,283	512·94	112,318	...	440,601	688·44
South Arcot	104,937	163·96	141,655	2	246,590	385·30
Tanjore	5,869	9·17	4,398	..	10,267	16·04
Trichinopoly	101,968	159·33	19,998	...	121,966	190·57
Salem	487,301	761·41	131,115	...	618,416	966·28
Total ...	1,555,257	2,430·09	817,140	2	2,372,395	3,706·87
Southern Circle.						
Madura	298,506	466·41	7,845	...	306,351	478·67
Tinnevelly	363,135	567·40	13,523	113,821	262,837	410·68
North Coimbatore	310,280	484·81	7,526	...	317,806	496·57
South Coimbatore	362,261	566·03	...	...	362,261	566·03
Nilgiris	132,530	207·08	17,026	144	149,412	233·46
North Malabar	75,841	118·51	20,240	...	96,081	150·13
South Malabar	25,167	39·32	6	...	25,173	39·33
South Canara	59,602	93·13	4,337	...	63,939	99·91
Total ...	1,627,322	2,542·69	70,503	113,965	1,583,860	2,474·78
Grand Total ...	4,591,920	7,174·87	1,562,400	115,597	6,038,723	9,435·50

Annual Form No. 59-B.

Forest Department, Madras Presidency.

Area of Reserved Lands, 1892–93.

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Northern Circle.									
Ganjám.	West Goomsur.	Kaliamba	5,200	...	...	...	5,200	...	.....	
		Teleki	15,200	...	...	...	15,200	...	.....	
		Baibali	21,920	...	...	...	21,920	...	.....	
		Darpangia ...	16,160	...	...	...	16,160	...	.....	
		Rambha	9,300	...	...	...	9,300	...	.....	
		Gullery	23,860	...	...	...	23,860	...	.....	
	East Goomsur.	Koolada	2,760	...	...	...	2,760	...	.....	
		Ambazara ...	32,000	...	...	...	32,000	...	.....	
		Chodiapalli ...	960	...	...	...	960	...	.....	
		Gundribadi ...	12,200	...	...	...	12,200	...	.....	
		Do. N. and S. extensions.	...	...	9,500	...	9,500	...	No. 240 of 26th May 1892.	
		Gogoda	15,240	...	...	...	15,240	...	.....	
		Paichalia	13,760	...	...	...	13,760	...	.....	
		Brahmanosai ...	8,080	...	...	...	8,080	...	.....	
	Bugudá ...	Kurcholi	5,520	...	...	...	5,520	...	.....	
		Kriyamba	23,320	...	...	...	23,320	...	.....	
		Sandusalya ...	2,000	...	...	...	2,000	...	.....	
		Bodochendana ...	800	...	...	...	800	...	.....	
	Suradá ...	Dhougam	2,400	...	...	...	2,400	...	.....	
		Rogoda	16,000	...	...	...	16,000	...	.....	
		Pipalapanka ...	7,700	...	...	...	7,700	...	.....	
		Moondapitta ...	6,880	...	...	...	6,880	...	.....	
		Hukuma	4,160	...	...	...	4,160	...	.....	
		Rayigoda	6,700	...	...	...	6,700	...	.....	
	Berhampur ...	Ramagodo ...	6,620	...	...	...	6,620	...	.....	
		Bainamari ...	3,750	...	...	...	3,750	...	.....	
		South Mohiri ...	3,730	...	...	...	3,730	...	.....	
		Bollibogoda ...	261	...	...	...	261	...		
		Balakristnapuram.	164	...	...	...	164	...		
		Chatrapur ...	695	...	...	...	695	...	No. 199 of 10th May 1892.	
		Dhura	279	...	100	...	379	...		
		Golobondo ...	379	...	...	...	379	...		
		Podhora	760	...	...	...	760	...		
		Mushidipalem ...	238	...	...	...	238	...		
		Kusimi	625	...	...	...	625	...	No. 172 of 26th April 1892.	
		Bendaliya	163	...	...	...	163	...		
		Mohoda	419	...	...	...	419	...		
		Mushujakalli or Kukkarakandi.	522	...	...	...	522	...	No. 458 of 22nd Sept. 1892.	
		Ankusapuram ...	138	...	...	...	138	...	No. 473 of 22nd Sept. 1892.	
		Mohugora ...	1,697	...	...	...	1,697	...	No. 457 of 22nd Sept. 1892.	
		Mahartapalli ...	924	...	...	...	924	...	.....	
		Virakrishnachandrapuram.	445	...	...	...	445	...	.....	
		Godohill	225	...	...	...	225	...	.....	
		Joronohill ...	1,002	...	...	...	1,002	...	.....	
		West Batukamarada.	179	...	...	...	179	...	.....	
		Nimmapuram ...	697	...	...	...	697	...	.....	
		Sikharapuram ...	260	...	...	...	260	...	.....	
		Shapuram	142	...	...	...	142	...	.....	
		Napier's Park ...	27	...	...	...	27	...	No. 199 of 10th May 1892.	
	Chicacole ...	Tuluga	148	...	...	...	148	...	.....	
		Ampolu	225	...	...	...	225	...	.....	
		Singupuram ...	693	...	...	...	693	...	.....	
		Rana	107	...	...	...	107	...	.....	
		Rahimapuram ...	274	...	...	...	274	...	.....	
		Koderu	279	...	...	...	279	...	.....	

Area of Reserved Lands, 1892-92—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		Northern Circle—*cont.*								
Ganjám —*cont.*	Chicacole—*cont.*	Jammu	175	...	...	...	175	...	.....	
		Godalam	125	...	...	...	125	...	.....	
		Rankuhanumanthapuram, Nos. I, II and III.	1,520	...	...	...	1,520	...	.....	
		Total ...	280,007	437·51	9,600	...	289,607	452·51		
Vizagapatam.	Golgonda ...	Arlova	*2,472	...	† 1	2,473	...	...	No. 496 of 14th Oct. 1892.	Transferred to reserved forest.
		Pedimkonda ...	*3,227	...	...	...	3,227	...	.....	
		Kakurlakonda ...	1,924	...	...	1,924	...	...	No. 496 of 14th Oct. 1892.	Do.
		Venkatapuram ...	508	...	...	508	...	...		
		Kodavatipudi ...	1,544	...	...	1,544	...	...		
	Palkonda Agency.	Madalammakonda.	3,600	...	...	...	3,600	...	.....	
		Karakakonda ...	6,270	...	...	...	6,270	...	.....	
		Barnakonda ...	16,240	...	...	...	16,240	...	.....	
		Antikonda ...	6,800	...	...	...	6,800	...	.....	
		Kadayandi ...	9,920	...	...	...	9,920	...	.....	
	Golgonda ...	Sinivaram ...	...	...	31,340	...	31,340	...	No. 347 of 1st Aug. 1892.	
		Dharkonda ...	...	...	46,880	...	46,880	...		
		Boiniti	...	..	32,960	...	32,960	...		
		Chintapalli ...	...	...	12,660	...	12,660	...		
	Palkonda ...	Chinnamangalapuram.	...	...	51	...	51	...	No. 45 of 25th Jan. 1893.	
		Garugupilli ...	...	...	27	...	27	...	No. 47 of 25th Jan. 1893.	
		Chinnagora ...	...	...	2,047	...	2,047	...	No. 312 of 9th June 1893.	
		Ichapuram ...	...	...	900	...	900	...		
	Sarvasiddhi ...	Vemagiri	...	..	1,641	...	1,641	...	No. 236 of 1st May 1893.	
		Gokivada	...	...	1,305	...	1,305	...		
		Panchadharla ...	...	...	1,221	...	1,221	...		
		Kalavalapalli ..	...	...	1,242	...	1,242	...		
		Rambilli	...	...	485	..	485	...		
		Total ...	52,505	82·04	132,760	6,449	178,816	279·40		
Gódávari.	Peddápuram.	Ramasaram ...	2,500	...	...	...	2,500	...	.....	
		Banadapalli ...	6,800	...	...	...	6,800	...	.....	
		Lododdi	8,400	...	...	...	8,400	...	.....	
		Vatangi	11,000	...	...	...	11,000	...	.....	
		Aminbada ...	5,600	...	...	...	5,600	...	.....	
		Anantagiri ...	3,900	...	...	...	3,900	...	.....	
		Laburti	8,100	..	...	...	8,100	...	.....	
		Doramamidi ...	7,200	...	...	...	7,200	...	.....	
		Verabhadram ...	11,200	...	...	...	11,200	...	.....	
		Jeddangi	6,700	...	...	...	6,700	...	.....	
		Annavaram ...	10,500	...	...	...	10,500	...	.....	
		Peddagurangi ...	5,800	...	...	...	5,800	...	.....	
		Lingamparti ...	7,600	...	...	...	7,600	...	.....	
		Devancheruvu ...	5,000	...	...	...	5,000	...	.....	
		Lakkonda ...	13,000	...	...	...	13,000	...	.....	
		Molleru	10,000	...	...	10,000	...	...	No. 476 of 6th Oct. 1892.	1,750 acres excluded at settlement and 8,250 acres transferred to reserved forest.
	Rajahmundry.	Sudikonda ...	6,880	...	...	6,880	...	...	No. 53 of 27th Jan. 1892.	Transferred to reserved forest.
		Mallavaram ...	6,500	...	...	...	6,500	...	.....	
		Tirumaliapalem ...	9,200	...	...	...	9,200	...	.....	
		Walsugri	8,700	...	...	...	8,700	...	.....	

* Inserted wrongly in previous year's return.

† By rectification of area.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		NORTHERN CIRCLE—*cont.*								
Gódávari—*cont.*	Rékapalle ...	Rékapalle Hills ...	107,700	...	...	...	107,700	...	.....	
	Delta ...	Upputeru ...	10,000	...	...	...	10,000	...	.....	
		Kandikuppa ...	9,000	...	...	...	9,000	...	.....	
	Ellore ...	Ungutur, Blocks I and II.	4,500	...	...	...	4,500	...	.....	
	Yernagúdem.	Jilugumilli ...	3,300	...	...	...	3,300	...	.....	
		Darbhagudem ...	2,200	...	...	...	2,200	...	.....	
		Barrinkalapadu ...	1,600	...	...	...	1,600	...	.....	
		Thaduvai ...	1,900	...	...	...	1,900	...	.....	
		Marlagudem ...	2,700	...	...	...	2,700	...	.....	
		Beddádavole. ...	15,000	...	...	...	15,000	...	.....	
		Rajahmundram ...	400	...	...	...	400	...	.....	
		Nallacherla ...	11,000	...	...	...	11,000	...	.....	
		Kopilli	19,000	...	...	...	19,000	...	.....	
		Kovvada	19,000	...	...	...	19,000	...	.....	
		Papikonda ...	21,000	...	...	...	21,000	...	.....	
		Total ...	382,880	598·25	...	16,880	366,000	571·87		
Kistna.	Bezwada ...	Kondapalle. ...	20,722	...	...	20,722	...	...	No. 308 of 24th June 1892.	Transferred to reserved forest.
		Kothur	700	...	...	...	700	...	.....	
	Guntúr ...	Kolakalur	1,403	...	...	1,403	...	...	.....	Deducted 47 acres by rectification of area and transferred to reserved forest 1,356 acres.
		Lam	987	...	...	* 90	897	...	.....	
	Vinukonda ...	Bollapalli, Nos. I & II.	12,000	...	...	...	12,000	...	.....	
		Koppukonda ...	5,000	...	...	5,000	...	...	No. 300 of 24th June 1892.	Transferred to reserved forest.
	Palnad ...	Pasvemula ...	22,782	...	(*a*) 5,514	(*b*) 22,782	5,514	...	(*a*) No. 81 of 30th Jan. 1893. (*b*) No. 93 of 5th March 1892.	(*b*) Do.
		Kandlagunta ...	34,947	...	(2) 1,000	(*d*) 34,947	21,000	...	(*c*) Reserved lands under rules under section 26. (*d*) No. 47 of 22nd Jan. 1892.	(*d*) Do
		Tangeda, II ...	1,395	...	(*e*) 5,600	(*f*) 1,395	5,600	...	(*e*) Reserved lands under section 26. (*f*) No. 543 of 25th Nov. 1892.	(*f*) 95 acres deducted at settlement and 1,300 acres transferred to reserved forest.
		Tummurukodu, No. II	2,940	...	...	...	2,940	...	(*g*) Reserved lands under rules under section 26.	
		Do. No. III	3,730	...	(*g*) 450	...	4,180	...		
		Mutukur	31,360	...	(*g*) 12,440	(*h*) 31,360	12,440	...	(*h*) No. 58 of 1st June 1892.	Transferred to reserved forest.
	Bezwada ...	Jangalpulli ...	...	...	1,420	...	1,420	...	No. 443 of 13th Sept. 1892	
		Velavadam ...	...	...	940	...	940	...	No. 446 of 13th Sept. 1892.	
		Dasullapalem ...	...	...	1,280	...	1,280	...	No. 539 of 19th Nov. 1892.	
		Gannavaram ...	...	...	1,990	...	1,990	...	No. 540 of 19th Nov. 1892.	
		Gollapudi ...	...	...	1,022	...	1,022	...	No. 551 of 19th Nov. 1892.	
		Vellatur	...	...	600	...	600	..	Reserved lands under section 26 of the Forest Act.	
		Jupudi	...	...	300	...	300	...		

* By revised estimate.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and Date of notification of addition or transfer.	Remarks.
Northern Circle—*cont.*										
Kistna—*cont.*	Guntúr ...	Kondavid, Extension I.	...	...	550	...	550	...	No. 433 of 7th Sept. 1892.	
		Do. „ II.	...	...	250	...	250	...		
		Chinnapalakalur, I and II.	...	...	432	...	432	...	No. 461 of 22nd Sept. 1892.	
		Peddamaduru ...	...	...	300	...	300	...	No. 417 of 29th Aug. 1892.	
		Nidumukkala ...	...	...	690	..	690	...	No. 459 of 22nd Sept. 1892.	
		Motadaka	...	...	318	...	318	...	No. 546 of 25th Nov. 1892.	
	Sattenapalle ...	Venkatayapalm, Extension VII.	...	...	1,200	...	1,200	...	.....	Reserved lands under rules under section 26 of the Forest Act.
		Do. „ VIII.	...	...	1,900	...	1,900	...	.....	
		Do. „ IX.	...	...	400	...	400	...	.....	
		Do. „ X.	...	...	700	...	700	...	.....	
		Kuntumaddi ...	...	...	800	...	800	...	.....	
		Kandipad	...	...	360	...	360	...	.....	
		Krosur, I and II ...	...	...	930	...	930	...	.....	
		Takkellapad ...	...	...	360	...	360	...	.....	
		Chamarru ..	...	...	760	...	760	...	.....	
		Yellamarazupallem	...	...	900	...	900	...	.....	
		Konaki, Extension I	...	...	1,300	...	1,300	...	.....	
		Do. „ II.	...	...	3,500	...	3,500	...	.....	
		Sitarampuram ...	...	...	1,500	...	1,500	...	.....	
	Vinukonda ...	Bollapalle, Extension III.	...	...	3,133	...	3,133	...	No. 548 of 25th Nov. 1892.	
		Do. „ IV.	...	...	737	...	737	...	No. 560 of 25th Nov. 1892.	
		Do. „ V.	...	...	860	...	860	...	No. 541 of 25th Nov. 1892.	
		Do. „ VI.	..	...	807	...	807	...	No. 329 of 19th June 1893.	
		Kakirala, Extension I.	...	...	222	...	222	...	No. 324 of 19th June 1893.	
		Vinukonda ...	...	...	8,224	...	8,224	...	No. 281 of 15th June 1892.	
		Gokanakonda ...	...	...	328	...	328	...	No. 88 of 9th Feb. 1893.	
		Kopparam, II ...	...	...	750	...	750	...	No. 538 of 17th Nov. 1892.	
		Kolalapudi ...	...	...	303	...	303	...	No. 46 of 25th Jan. 1893.	
		Putsanutula ...	...	...	801	...	801	..	No. 545 of 25th Nov. 1892.	
		Bogaram	...	...	58	...	58	...	No. 601 of 12th Dec. 1892.	
		Ravavaram ...	...	...	303	...	303	...	No. 154 of 18th Mar. 1893.	
		Ramudupalem ...	...	...	774	...	774	...		
		Nayanapalem, I and II.	...	...	1,367	...	1,367	...	No. 82 of 30th Jan. 1893.	
		Yellamanda, I and II.	...	...	1,625	...	1,625	...	No. 83 of 2nd Feb. 1893.	
		Narasayapalem ...	...	...	1,542	...	1,542	...	No. 405 of 19th Aug. 1892.	
		Garladinne ...	...	...	518	...	518	...	No. 170 of 27th April 1892.	
		Bobbepalli ...	...	...	357	...	357	...	No. 301 of 5th June 1893.	
		Yelchur, I ...	...	...	330	...	330	...	No. 305 of 9th June 1893.	
		Do. II ...	...	...	260	...	260	...	.....	Reserved land under rules under section 26 of the Forest Act.
		Gorrepad	...	...	1,067	...	1,067	...	No. 303 of 5th June 1893.	
		Nagarazupalli ...	...	...	792	...	792	...	No. 306 of 8th June 1893.	

Area of Reserved Lands, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		Northern Circle—*cont.*								
Kistna—*cont.*	Vinukonda—*cont.*	Pronadula ...	...	...	255	...	255	...	No. 307 of 6th June 1893.	
		Muppala	...	...	4,600	...	4,600	...	.....	Reserved land under rules under sec. 26 of the Forest Act.
	Palnad ...	Gangalakunta, I ...	...	...	1,800	...	1,800	...	.....	Do.
		Madinapad, Extension I.	...	...	1,500	...	1,500	...	.....	
		Darvemula ...	...	...	760	...	760	...	No. 113 of 24th Feb. 1893.	
		Atmakur	...	...	211	...	211	...	No. 60 of 30th Jan. 1893.	
		Kambhampad ...	...	...	592	...	592	...	No. 59 of 30th Jan. 1893.	
		Madugala	...	...	2,800	...	2,800	...	.....	Reserved lands under rules under section 26 of the Forest Act.
		Daida	...	...	3,100	...	3,100	...	.....	
		Gali	...	...	4,300	...	4,300	...	.....	
		Rayavaram ...	...	...	217	...	217	...	.....	
		Podagarlapadu ...	...	...	1,400	...	1,400	...	.....	
		Vemavaram ...	...	...	2,600	...	2,600	...	.....	
		Govindapuram ...	...	...	2,000	...	2,000	...	.....	
		Dáchépalle ...	...	...	850	...	850	...	.....	
		Total ...	137,966	215·57	121,849	117,699	142,116	222·06		
Ananta-pur.	Gooty ...	Peddadoddi ...	3,200	...	...	3,200	...	...	No. 237 of 16th May 1892.	721 acres deducted by rectification of area and 2,479 acres transferred to reserved forest.
		Jakkalacheruvu ...	3,200	...	...	*732	2,468	...	.....	
		Nagasamudram N. & S.	9,600	...	*2,131	...	11,731	...	.....	
		Cutturmulla ...	7,680	...	*4,802	...	12,482	...	.....	
		Bhadrampalle ...	4,225	...	*1	4,226	...	...	No. 17 of 9th Jan. 1893.	Transferred to reserved forest.
		Marutla	11,520	...	*1,436	...	12,956	...	.....	
		Tarramalla ...	8,960	...	*2,614	...	11,574	...	.....	
		Yadaki	5,120	...	*4,556	...	9,676	...	.....	
		Guntakal, I, II & III	890	...	*43	933	...	...	Nos. 67, 68, and 69 of 13th Feb. 1892.	Transferred to reserved forest.
	Muchukota ...	Muchukota ...	21,759	...	...	...	21,759	...	.....	
		Durgam	3,200	...	*440	3,640	...	...	No. 407 of 22nd Mar. 1893.	Transferred to reserved forest.
		Kudair	4,480	...	...	...	4,480	...	.....	
		Upparapalli ...	640	...	*142	...	782	...	.....	
		Dadithota	1,920	...	*1,714	3,634	...	...	No. 456 of 21st Sept. 1892.	Transferred to reserved forest.
		Yellutla	9,182	...	...	9,182	...	...	No. 38 of 16th Jan. 1893.	
		Chillawaripalle ...	3,840	...	*1,140	4,980	...	...	No. 409 of 22nd Aug. 1892.	
		Konakuntla ...	1,600	...	*16	1,616	...	...	No. 406 of 22nd Aug. 1892.	
		Nairjampalle ...	2,285	...	...	2,285	...	...	No. 485 of 10th Oct. 1892.	
		Yellanur	320	...	*836	...	1,156	...	.....	
	Dharmavaram.	Gootoor, E. & W. ...	7,804	...	...	...	7,804	...	.....	
		Kalyándrug ...	1,552	...	...	1,552	...	...	Nos. 294 and 303 of 15th June 1892.	81 acres deducted at settlement and 1,471 acres transferred to reserved forest.
		Ramghiri	10,240	...	...	*713	9,527	...	.....	

* By rectification of area.

Area of Reserved Lands, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		NORTHERN CIRCLE—*cont.*								
Anantapur—*cont.*	Dharmavaram —*cont.*	Bhadrapur ...	3,347	...	* 1,773	5,120	...	...	No. 151 of 12th April 1892.	Transferred to reserved forest.
		Nyalakota ...	12,857	...	...	* 701	12,156	...	.....	
	Penukonda	Penukonda Hill ...	4,946	...	...	* 304	4,642	...	.....	
		Somandapally ...	9,782	...	...	...	9,782	...	.....	
		Yerlampalle ...	3,550	...	...	* 247	3,303	...	.....	
		Mallappakonda ...	5,120	...	...	* 750	4,370	...	.....	
		Mallakavemela-konda.	2,138	...	* 147	...	2,285	...	.....	
		Jannavaripalle ...	3,200	...	* 2,885	...	6,085	...	.....	
		Agraharam ...	2,300	...	...	2,300	...	...	No. 562 of 25th Nov. 1892.	166 acres excluded at settlement and 2,134 acres transferred to reserved forest.
		Venglamcheruvu ..	2,880	...	...	2,880	...	...	No. 18 of 9th Jan. 1893.	509 acres excluded at settlement and 2,371 acres transferred to reserved forest.
	Hindúpur	Yerrakonda ...	7,729	...	...	...	7,729	...	.....	
		Amagondapaliem ...	15,772	...	...	* 412	15,360	...	.....	
		Dokkalakonda ...	7,420	...	...	...	7,420	...	.....	
		Kondur	607	...	...	607	...	...	No. 353 of 1st Aug. 1892.	Transferred to reserved forest.
		Gopidevarapalle ..	1,884	...	...	...	1,884	...	.....	
	Gooty	Penukacherla, Block I.	...	...	660	...	660	...	No. 173 of 27th April 1892.	
		Penkacherla, Block II.								
		Illur	...	...	1,293	...	1,293	...	No. 183 of 10th April 1893.	
		Koppulakonda ...	...	...	754	...	754	...	No. 107 of 23rd Feb. 1893.	
		Kristipadu ...	...	...	869	...	869	...	No. 222 of 27th April 1893.	
		Teliki	...	...	891	...	891	...		
	Penukonda ...	Cherlopalli ...	...	...	2,944	...	2,944	...	No. 184 of 10th April 1893.	
	Madakseera ...	Kakathi	...	...	2,478	...	2,478	...	No. 325 of 20th June 1893.	
		Total ...	206,749	323·05	34,565	50,014	191,300	298·91		
Bellary.	Ádóni ...	Ganekolu	1,070	...	...	1,070	...	...	No. 259 of 10th June 1892.	Transferred to reserved forest.
		Sulekeri	1,380	...	...	...	1,380	...	.....	
		Ráyachóti	1,892	...	...	† 304	1,588	...	.....	
		Kurimetla ...	2,812	...	...	...	2,812	...	.....	
		Kotekallu	2,575	...	...	2,575	...	...	No. 379 of 25th July 1892.	Transferred to reserved forest.
		Ádóni, East ...	2,172	...	...	2,172	...	...	No. 119 of 27th Feb. 1893.	338 acres excluded at settlement and 1,834 acres transferred to reserved forest.
		Do. West ...	3,165	...	...	...	3,165	...	.....	
		Kúpgal	4,638	...	...	...	4,638	...	.....	
		Tungabhadra ...	4,633	...	...	...	4,633	...	.....	
		Kosgi	2,951	...	...	...	2,951	...	.....	
		Kudbúr	2,956	...	...	...	2,956	...	.....	
		Bilehalu	916	...	...	‡ 10	906	...	.....	

* By rectification of area. † Correction of area. ‡ Deducted at settlement.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		NORTHERN CIRCLE—*cont.*								
Bellary—*cont.*	Ádóni—*cont.*	Kanchagara Bilagallu.	856	...	...	856	...	...	No. 91 of 6th Feb. 1893.	Transferred to reserved forest.
		Holalagondi ...	906	...	...	906	...	...	No. 21 of 9th Jan. 1893.	
		Muddatamagi ...	317	...	...	317	...	...	No. 33 of 16th Jan. 1893.	
		Virupapuram ...	136	...	...	136	...	...	No. 37 of 19th Jan. 1893.	26 acres deducted by rectification of area and 110 acres transferred to reserved forest.
		Pagaluchukkavanka.	241	...	...	241	...	...	No. 101 of 13th Feb. 1893.	
		Ramadurgamkonda.	337	...	...	337	...	...	No. 549 of 25th Nov. 1892.	
		Nagaradona ...	140	...	...	140	...	...	No. 572 of 6th Dec. 1892.	
	Bellary ...	Suguru	530	...	...	530	...	...	No. 190 of 7th May 1892.	
		Nadivi	425	...	...	425	...	...	No. 210 of 10th May 1892.	
		Vonnahalli ...	105	...	...	105	...	...	No. 400 of 18th Aug. 1892.	Transferred to reserved forest.
		Mundrigi	48	...	*1	49	...	...	No. 364 of 11th Aug. 1892.	
		Dharmapuri ...	4,100	...	...	4,100	...	...	No. 487 of 12th Oct. 1892.	
	Sandúru ...	Hospet	3,030	...	...	3,030	...	...	No. 236 of 26th May 1892.	
		Oblagundi... ...	692	...	...	692	...	...	No. 116 of 18th Mar. 1892.	
		Billekal	12,447	...	...	12,447	...	...	No. 149 of 17th Mar. 1893.	
		Buckasagar ...	6,000	...	...	6,000	...	...	No. 590 of 7th Dec. 1892.	13 acres deducted by rectification and 5,987 acres transferred to reserved forest.
		Bandri	16,239	...	...	16,239	...	...	No. 495 of 17th Oct. 1892.	Transferred to reserved forest.
		Sandúru	40,000	...	...	...	40,000	...	.....	
	Kúdligi ...	Banivikal	3,564	...	...	3,564	...	...	No. 213 of 12th May 1892.	Do.
		Nimblagiri ...	4,792	...	...	4,792	...	...	No. 192 of 7th May 1892.	
		Gudekota	7,000	...	...	...	7,000	...	.....	
		Harada	16,400	...	...	...	16,400	...	.....	
		Sogai	4,200	...	...	...	4,200	...	.....	
		Jitnakatta ...	12,646	...	...	† 402	12,244	...	.....	
		Jangukalgutta ...	12,882	...	...	...	12,882	...	.....	
		Alagilavada ...	1,900	...	...	1,900	...	...	No. 120 of 16th Mar. 1892.	Do.
		Uchingidrug ...	4,200	...	...	4,200	...	...	No. 23 of 9th Jan. 1893.	
		Sunkadakal, East...	843	...	...	843	...	...	No. 380 of 17th Aug. 1892.	
		Kakkuppi	9,000	...	...	...	9,000	...	.....	
		Ramadurgam ...	2,500	...	...	2,500	...	...	No. 595 of 6th Dec. 1892.	Do.
	Ádóni ...	Halaharvi ...	...	...	840	...	840	...	No. 100 of 9th Feb. 1893.	
		Chinnakadabur ...	...	...	669	...	669	...		
		Dibbanakallu ...	...	...	974	...	974	...	No. 275 of 16th May 1893.	
		Basapuram ...	...	...	204	...	204	...		
		Belagallu	...	...	764	...	764	...	No. 326 of 13th June 1893.	
		Kandakur ...	...	...	514	...	514	...		

* Correction of area. † Rectification of area.

Area of Reserved Lands, 1892-93—*cont.*

District	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Northern Circle—*cont.*									
Bellary—*cont.*	Bellary ...	Haladahalli ...	...	...	259	...	259	...	No. 100 of 9th Feb. 1893.	
		Kenchanaguddam.	...	...	355	...	355	...	No. 102 of 9th Feb. 1893.	
		Nagalapuram ...	...	...	555	...	555	...	No. 100 of 9th Feb. 1893.	
		Vírápuram ...	...	...	4,353	...	4,353	...		
		Shiripi, A	...	...	915	...	915	...		
		Kontanáhalli ...	...	...	1,318	...	1,318	...		
		Banduru	...	...	695	...	695	...	No. 102 of 9th Feb 1893.	
		Udegalam ...	...	...	617	...	617	...		
		Upparahosahalli ...	...	...	1,179	...	1,179	...	No. 275 of 16th May 1893.	
		Balakundi ...	...	...	309	...	309	...		
		Shrirangapuram ...	...	...	866	...	866	...		
		Shripi, B	...	...	379	...	379	...		
		Uddihalu	...	...	659	...	659	...		
		Mecheri, Blocks A & B.	...	...	318	...	318	...		
		Mallapuram ...	...	...	853	...	853	...		
	Sandúru ...	Pápináyakanahalli.	...	...	346	...	346	...	No. 326 of 13th June 1893.	
	Kúdligi ...	Chelakanahatti ...	...	...	743	...	743	...	No. 102 of 9th Feb. 1893.	
		Shivapuram Extension.	...	...	6,045	...	6,045	...		
		Chiribi Extension.	...	...	5,643	...	5,643	...	No. 100 of 9th Feb. 1893.	
		Kakkuppi, North-east.	...	...	1,580	...	1,580	...	No. 102 of 9th Feb. 1893.	
		Kakkuppi, South-east.	...	...	604	...	604	...		
		Karaginahalli ...	...	...	3,127	...	3,127	...		
		Banavikallu, North-eastern extension.	...	...	1,655	...	1,655	...		
		Hampapatnam ...	...	...	115	...	115	...		
		Koilaragatti ...	...	...	2,225	...	2,225	...		
		Tambinakeri ...	...	...	2,016	...	2,016	...		
		Alagilavada extension.	...	...	4,160	...	4,160	...	No. 100 of 9th Feb. 1893.	
		Sogi, Northern extension.	...	...	487	...	487	...	No. 275 of 16th May 1893.	
		Sogi, North-western extension.	...	...	308	...	308	...		
		Sogi, Southern extension.	...	...	230	...	230	...		
		Murakalamurdi ...	...	...	450	...	450	...		
		Nimbalagiri, Northern extension.	...	...	359	...	359	...		
		Nimbalagiri, Western extension.	...	...	698	...	698	...		
		Nimbalagiri, South-eastern extension.	...	...	1,878	...	1,878	...	No. 326 of 13th June 1893.	
		Nilgunda	...	...	1,978	...	1,978	...		
		Sunkadakallu, North-western extension.	...	...	450	...	450	...		
		Sunkadakallu, South-western extension.	...	...	6,426	...	6,426	...		
		Sunkadakallu, Eastern extension.	...	...	759	...	759	...		
		Total ...	197,636	308·81	59,878	70,882	186,632	291·61		
Kurnool.	Cumbum and Markapur.	Cumbum	217,000	...	*600	217,600	...	...	No. 104 of 5th Mar. 1892.	
	Markapur ...	Markapur	181,875	...	...	181,875	...	...	No. 105 of 5th March 1892.	
	Cumbum ...	Western Veligondas.	17,210	...	*570	17,780	...	...	No. 50 of 22nd Jan. 1892.	

* Correction of area.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		NORTHERN CIRCLE—*cont.*								
Kurnool—*cont.*	Pattikonda and Ramallakot.	South Dhone ...	4,000	...	...	4,000	...	...	No. 52 of 19th Jan. 1892.	11 acres excluded at settlement and 3,989 acres transferred to reserved forest.
		North Dhone ...	10,000	...	...	...	10,000	...	.....	
	Pattikonda ...	Pendikallu ...	2,570	...	...	...	2,570	...	.....	
		Kapatralla ...	2,880	...	...	...	2,880	...	.....	
		Karumanchi ...	1,550	...	...	...	1,550	...	.....	
		Katamkonda ...	3,430	...	...	...	3,430	...	.....	
		Gundlakonda ...	4,690	...	...	...	4,690	...	.....	
		Peddapaya ...	...	...	3,380	...	3,380	...	No. 166 of 27th April 1892.	
		Pyápili	...	...	1,290	...	1,290	...		
		Tekulakonda ...	...	...	715	...	715	...		
		Jaladurgam ...	...	...	19,337	...	19,337	...	No. 168 of 27th April 1892.	
	Sirvel ...	Sirvel Terai, Block I of Kotakonda.	...	...	1,725	...	1,725	...	No. 189 of 4th May 1892.	
		Sirvel Terai, Block II of Ahobalam.	...	...	16,530	...	16,530	...		
		Sirvel Terai, Block III of Bachepalli.	...	...	10,300	...	10,300	...		
	Nandyal ...	Nandyal Terai, Block I of Gazulapalli.	...	...	6,000	...	6,000	...	No. 186 of 4th May 1892.	
		Nandyal Terai, Block II of Yernapad.	...	...	16,400	...	16,400	...		
	Markapur ...	Yerrakondapalam.	...	...	10,190	...	10,190	...	No. 365 of 3rd Aug. 1892.	
		Baddivid	...	...	1,030	...	1,030	..	No. 28 of 21st Jan. 1893.	
		Tokapalle	...	...	1,407	...	1,407	...	No. 313 of 9th June 1893.	
		Tamballapalli ...	...	...	2,014	...	2,014	...		
		Total ...	445,205	695·63	91,488	421,255	115,438	180·37		
		Total of the Circle.	1,702,948	2,660·86	450,140	683,179	1,469,909	2,296·73		
		CENTRAL CIRCLE.								
Nellore.	Kanigiri ...	Chimakurthi ...	7,500	...	...	...	7,500	...	.....	
		Kanigiri Durgam.	1,500	...	*500	2,000	...	...	No. 494 of 14th Oct. 1892.	Transferred to reserved forest.
		Nandavanam ...	18,000	...	...	18,000	...	...	No. 334 of 27th July 1892.	
		Vedullacheruvu ...	9,000	...	...	...	9,000	...	.....	
	Kávali ...	Kávali	2,933	...	...	...	2,933	...	.....	
		Mungamore ...	94	...	...	...	94	...	.....	
		Kadanutla ...	289	...	...	...	289	...	.....	
		Talapalem ...	761	...	...	...	761	...	.....	
		Kávali ...	1,511	...	...	...	1,511	...	.....	
		Kolladinne ...	561	...	...	...	561	...	.....	
		Musunur	1,014	...	...	...	1,014	...	.....	
		Anamadugu ...	941	...	...	...	941	...	.....	
		Chennayyapolliem.	1,161	...	...	...	1,161	...	.....	
		Tummalapenta ...	2,476	...	...	...	2,476	...	.....	
		Rudrakota ...	343	...	...	...	343	...	.....	
	Udayagiri ...	Udayagiri Durgam.	11,280	...	...	11,280	...	...	No. 440 of 13th Sept. 1892.	Transferred to reserved forest.
		Yerrakondas ...	14,080	...	...	...	14,080	...	.....	
		Udayagiri Veligondas.	60,140	...	...	...	60,140	...	.....	

* Correction of area.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		CENTRAL CIRCLE—*cont.*								
Nellore—*cont.*	Nellore ...	Nellore ...	2,560	...	...	2,560	...	...	No. 110 of 23rd Feb. 1893.	1,920 acres deducted at settlement and 640 transferred to reserved forest.
	Gudur ...	Sríharikóta and its outliers.	35,710	...	...	...	35,710	...	.....	
		Kottapatnam Plantation.	385	...	* 1,035	...	1,420	...	.....	
		Kottapatnam ...	2,500	...	...	2,500	...	...	No. 239 of 26th May 1892.	500 acres deducted at settlement and 2,000 acres transferred to reserved forest.
	Rapur ...	Sydapuram ...	2,080	...	...	2,080	...	...	No. 297 of 22nd June 1892.	450 acres deducted at settlement and 1,630 acres transferred to reserved forest.
		Marlapudi ...	4,550	...	...	4,550	...	...	No. 277 of 16th June 1892.	Transferred to reserved forest.
		Pategunta ...	1,500	...	...	1,500	...	...	No. 44 of 19th Jan. 1892.	
		Cherlopalli ...	3,360	...	...	3,360	...	...	No. 57 of 2nd Feb. 1892.	
		Veminabhi ...	2,080	...	* 170	2,250	...	...	No. 276 of 15th June 1892.	
		Yerragondas ...	19,000	...	...	...	19,000	...	.....	
		Podalakur ...	2,500	...	...	2,500	...	...	No. 129 of 23rd March 1892.	Do.
		Total ...	209,809	327·83	1,705	52,580	158,934	248·33		
Cuddapah.	Kódúru ...	Settikunta ...	960	...	...	...	960	...	.....	
		Cheyavaram ...	4,480	...	...	2,666	1,814	...	No. 174 of 27th April 1892.	Transferred to reserved forest.
		Kódúru	2,160	...	...	...	2,160	...	.....	
		Gotimanikona ...	108	...	...	...	108	...	.....	
		Yerraguntlakota ...	1,920	...	...	...	1,920	...	.....	
		Tippayapalli ...	960	...	...	* 626	334	...	.....	
		Kodivengamabavi.	2,400	...	...	...	2,400	...	.....	
	Rájampét ...	Marriutla	6,400	...	...	...	6,400	...	.....	
		Reddipalle Plantation.	516	...	...	...	516	...	.....	
		Ananthasamudram.	6,400	...	...	...	6,400	...	.....	
		Sanipaya Ghát ...	2,560	...	...	...	2,560	...	.....	
		Badugantapalle ...	3,520	...	...	...	3,520	...	.....	
		Vattalur Hill ...	320	...	...	...	320	...	.....	
	Rájampét and Kódúru.	Seshachellam and Rollamadugu.	3,840	...	...	...	3,840	...	.....	
		Solivendra ...	6,400	...	...	...	6,400	...	.....	
		Chitvél	10,240	...	...	...	10,240	...	.....	
	Rájampét and Rayachóti.	Gadikota	3,538	...	...	...	3,538	...	.....	
		Yerrakonda ...	8,320	...	...	...	8,320	...	.....	
	Rájampét, Sidhout and Rayachóti.	Cheyer	11,360	...	...	...	11,360	...	.....	
	Rájampét and Sidhout.	Kanakalakonda ...	6,400	...	...	...	6,400	...	.....	
		Patur	7,680	...	...	...	7,680	...	.....	
		Kokaletikanama ...	14,420	...	...	...	14,420	...	.....	
		Kothur	22,720	...	...	12,160	10,560	...	No. 599 of 12th Dec. 1892.	Transferred to reserved forest.

* Correction of area.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		CENTRAL CIRCLE—*cont.*								
Cuddapah—*cont.*	Sidhout ...	Malliamkonda ...	3,840	...	...	...	3,840	...	.....	
		Do. addition ...	1,280	...	...	...	1,280	...	.....	
		Vontimitta ...	5,760	...	...	4,500	1,260	...	No. 509 of 2nd Nov. 1892.	Transferred to reserved forest.
		Konarazupalle ...	9,600	...	* 96	9,696	...	...	No. 140 of 17th Mar. 1893.	Do.
		Turupukonda ...	30,080	...	...	...	30,080	...	.....	
		Ippakanama ...	1,600	...	...	...	1,600	...	.....	
	Badvél and Sidhout.	Ramapuram ...	7,680	...	...	(*a*) 5,300	380 (*b*)2,000	...	(*a*) No. 141 of 17th Mar. 1893. (*b*) No. 143 of 17th Mar. 1893.	(*b*) Notified under sec. 4.
	Cuddapah, Badvél and Sidhout.	Lankamalai ...	112,640	...	* 3,920	(*c*) 69,760	(*d*) 46,800	...	(*c*) No. 594 of 6th Dec. 1892. (*d*) No. 593 of 6th Dec. 1892.	(*c*) Transferred to reserved forest. (*d*) Notified under sec. 4.
	Cuddapah and Sidhout.	Kanamalapalle ...	5,255	...	...	...	5,255	...	.....	
	Cuddapah, Rayachóti and Sidhout.	Palkonda ...	81,920	...	...	...	81,920	...	.....	
	Badvél ...	Kavalakuntla ...	1,600	...	...	...	1,600	...	.....	
		Gopavaram ...	13,440	...	...	* 510	(*e*) 7,950 4,980	...	(*c*) No. 176 of 28th Mar. 1893.	(*e*) Notified under sec. 4
		Kalasapad ...	6,400	...	...	...	6,400	...	.....	
		Sancherla ...	5,760	...	...	...	5,760	...	.....	
		Tsallagirigulla ...	1,280	...	...	...	1,280	...	.....	
		Badvél	1,920	...	...	...	1,920	...	.....	
		Ganugapenta ...	3,200	...	...	...	3,200	...	.....	
	Badvél and Proddutur.	Kottakota and Dasarapalle.	104,960	...	...	...	104,960	...	.....	
		Kanchelamoram ...	8,960	...	* 718	...	9,678	...	.....	
		Ganganapalle ...	57,600	...	...	...	57,600	...	.....	
	Cuddapah and Rayachóti.	Idupalapaya ...	28,160	...	...	...	28,160	...	.....	
		Redlacheruvu ...	5,120	...	...	...	5,120	...	.....	
		Chelakampalle ...	6,400	...	...	...	6,400	...	.....	
		Kommaddi ...	1,600	...	...	...	1,600	...	.....	
		Tummalur ...	3,200	...	...	1,450	1,750	...	No. 600 of 12th Dec. 1892.	Transferred to reserved forest.
		Gonamakalapalle ...	1,280	...	...	1,280	...	...	No. 578 of 28th Nov. 1892.	Do.
	Cuddapah and Proddutur.	Bhanakotamala ...	13,600	...	...	...	13,600	...	.....	
		Mallela	5,120	...	* 1,200	...	6,320	...	.....	
		Kondasankesula ...	4,480	...	...	2,612	1,868	...	No. 523 of 7th Nov. 1892.	Do.
		Dabbudapalle ...	3,280	...	...	...	3,280	...	.....	
		Dhodiyam	2,720	...	...	1,800	920	...	No. 204 of 11th May. 1892.	Do.
		Malamidikambaladinne.	3,440	...	...	3,440	...	...	No. 598 of 7th Dec. 1892.	1,320 acres deducted by rectification and 2,120 acres transferred to reserved forest.
	Proddutur ...	Penner	640	...	...	520	120	...	No. 132 of 6th Mar. 1893.	Transferred to reserved forest.
		Gandikota	9,920	...	...	...	9,920	...	.....	
		Yamavaram ...	1,600	...	...	1,600	...	...	No. 434 of 5th Sept. 1892.	Do.
		Kosinepalle ...	7,040	...	...	7,040	...	...	No. 591 of 12th Dec. 1892.	2,740 acres deducted by rectification and 4,300 acres transferred to reserved forest.
		Nidijuvvi	2,880	...	...	...	2,880	...	.....	
		Kondapuram ...	3,840	...	...	...	3,840	...	.....	

* By correction of area.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Cuddapah—*cont.*	Ráyachóti ...	Sibbyala	340	...	...	...	340	...	.....	
		Tsundupalle ...	1,480	...	...	...	1,480	...	.....	
		Madhavaram ...	5,900	...	...	4,681	1,219	...	No. 334 of 22nd July 1892.	
		Brahmanayerragudi	5,760	...	...	...	5,760	...	.....	
		Hassanapuram ...	12,160	...	...	...	12,160	...	.....	
		Mudumpad slopes ...	5,760	...	*3,200	...	8,960	...	.....	
		Wongimalla ..	10,880	...	...	...	10,880	...	.....	
	Ráyachóti and Váyalpád.	Urukonda	8,960	...	...	8,960	...	...	No. 576 of 28th Nov. 1892.	974 acres excluded by rectification of area and 7,986 acres transferred to reserved forest.
	Ráyachóti, Madanapalle and Váyalpád.	Rekkalakonda ...	6,400	...	...	...	6,400	...	.....	
	Kadiri and Cuddapah.	Gorivikanama ...	28,800	...	*1,760	30,560	...	...	No. 518 of 7th Nov. 1892.	Transferred to reserved forest.
		Dorigallu ...	30,720	...	...	24,032	6,688	...	No. 514 of 31st Oct. 1892.	Do.
	Kadiri ...	Ishwaramala ...	15,360	...	...	...	15,360	...	.....	
		Kokanti ...	2,000	...	...	...	2,000	...	.....	
		Kadiri ...	10,240	...	...	...	10,240	...	.....	
		Nigadi and Tirumaladevarakonda.	29,240	...	...	27,770	1,470	...	No. 418 of 24th Aug. 1892.	Do.
		Kukkarazukonda ...	2,400	...	...	...	2,400	...	.....	
		Turmala	25,600	...	...	25,600	...	...	No. 257 of 8th June 1892.	1,503 acres deducted by rectification and 24,097 acres transferred to reserved forest.
		Malakavemala ...	1,920	...	*840	...	2,760	...	.....	
		Tummalamala ...	6,400	...	*1,810	8,210	...	...	No. 9 of 19th Dec. 1892.	Transferred to reserved forest.
		Kondagamerla ...	3,200	...	*913	...	4,113	...	.....	
		Somarazumala, east.	1,280	...	...	910	370	...	No. 579 of 28th Nov. 1892.	Do.
		Goduvelagala ...	1,920	...	*568	...	2,488	...	.....	
	Madanapalle...	Tavalam ...	5,120	...	*3,330	8,450	...	...	No. 513 of 2nd Nov. 1892.	Do.
		Pentzapad ...	2,870	...	...	2,870	...	...	No. 396 of 22nd Aug. 1892.	Do.
		Horsleykonda ...	15,500	...	...	15,500	...	...	No. 574 of 28th Nov. 1892.	Do.
		Avalakonda ...	8,370	...	...	7,700	670	...	No. 419 of 24th Aug. 1892.	Do.
		Tsadukonda ...	15,023	...	...	15,023	...	...	No. 39 of 19th Jan. 1893.	Do.
		Potapolu	364	...	*276	264	376	...	No. 352 of 1st Aug. 1892.	Do.
	Madanapalle and Váyalpád	Tarikonda	6,400	...	*431	6,831	...	...	No. 8 of 7th Dec. 1892.	Do.
		Gutapaliem ...	2,560	...	...	2,560	...	...	No. 56 of 2nd Feb. 1892.	38 acres excluded by rectificatio and 2,522 acres transferred reserved forest.
		Nurukupalakonda...	8,820	...	...	8,461	359	...	No. 511 of 1st Nov. 1892.	Do.
	Váyalpád	Yellutla	4,840	...	...	...	4,840	...	.....	
		Gajjibuchikona ...	320	...	*6,500	...	18,180	...	... ..	
		Yerramoralajedu ...	3,680							
		Marella	7,680							
		Ankalammakonda...	2,800	...	*1,840	4,640	...	...	No. 207 of 11th May 1892.	Transferred to reserved forest.

* By correction of area.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		CENTRAL CIRCLE—*cont.*								
Cuddapah—*cont.*	Vayalpád —*cont.*	Doddipalle ...	579	...	...	...	579	...	.....	
		Sorakayalapeta ...	2,560	...	* 272	2,832	...	...	No. 111 of 23rd Feb. 1893.	
		Talakona	19,840	...	...	19,840	...	...	No. 498 of 14th Oct. 1892.	940 acres excluded by rectification of area and 18,900 acres transferred to reserved forest.
		Bhakarapet ...	9,800	...	* 800	10,600	...	...	No. 474 of 5th Oct. 1892.	Transferred to reserved forest.
	Proddutur ...	Rameswaram ...	...	...	1,200	...	1,200	...	No. 206 of 12th May 1892.	
	Kadiri ...	Balasamudram ...	...	...	245	...	245	...	No. 212 of 12th May 1892.	
		Kutagallu	..	...	718	...	718	...		
		Nagireddipalle ...	...	...	694	...	694	...		
		Nallansettipalle ...	...	...	290	...	290	...		
		Mudigubba ...	...	...	441	...	441	...		
		Gungepalle ...	...	..	215	...	215	..		
	Madanapalle.	Chinnatippasamudram.	...	...	432	...	432	...	No. 200 of 12th May 1892.	
		Kurabalakota ...	...	...	348	...	348	...		
		Batlapur	...	...	956	...	956	...		
	Kadiri and Madanapalle.	Malakalcheruvu ...	...	...	330	...	330	...	No. 209 of 12th May 1892.	
	Váyalpád ...	Sorrakayalapeta Extension.	...	...	740	...	740	...	No. 31 of 16th Jan. 1893.	
		Piler	...	...	396	...	396	...	No. 201 of 11th May 1892.	
		Gattegadda ...	...	...	283	...	283	...		
		Váyalpád	...	...	215	...	215	...	No. 201 of 11th May 1892.	
		Total ...	1,030,563	1,610·25	35,977	361,254	705,286	1,102·00		
Chingleput.	Tiruvallúr ...	Attantangal ...	268	...	...	268	...	...	No. 109 of 24th Feb. 1893.	Transferred to reserved forest.
		Nayar	300	..	...	...	300	...	.....	
		Erumaivettipalaiyam.	555	...	...	...	555	...	.....	
		Kavalur	240	...	...	240	...	...	No. 85 of 14th Feb. 1893.	10 acres deducted at settlement and 230 acres transferred reserved forest.
		Manali	1,485	...	...	...	1,485	...	.....	
		Apasamudram ...	595	...	...	...	595	...	.....	
		Kuruvithittu ...	300	...	...	300	...	...	No. 112 of 28th Feb. 1893.	Transferred to reserved forests.
		Periyaoblapuram ...	66	...	...	66	...	...	No. 90 of 9th Feb. 1893.	
		Elavur	179	...	...	...	179	...	.....	
		Chinnaoblapuram ...	65	...	...	...	65	...	.....	
		Siruvalipettai, A ...	105	...	...	...	105	...	.....	
		Do. B ...	54	...	...	54	...	...	No. 93 of 6th Feb. 1893.	Do.
		Budur	86	...	...	86	...	...	No. 92 of 9th Feb. 1893.	
		Siruvadu	373	...	...	...	373	...	.....	
		Nemalur	980	...	...	...	980	...	.....	
		Irukulam	776	...	...	...	776	...	.....	
		Kuvakolli	228	...	..	228	...	...	No. 84 of 6th Feb. 1893.	Do.
		Nelvoyi	162	...	...	162	...	...	No. 34 of 16th Jan. 1893.	1 acre deducted at settlement and 161 acres transferred to reserved forest.
		Kalathur	212	...	...	212	...	...	No. 87 of 9th Feb. 1893.	Transferred to reserved forest.

* Correction of area.

Area of Reserved Lands, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		CENTRAL CIRCLE—*cont.*								
Chingleput—*cont.*	Tiruvallúr—*cont.*	Nayapakkam, A ...	1,421	...	...	...	1,421	...	.....	
		Do. B ...	164	...	...	164	...	...	No. 86 of 9th Feb. 1893.	1 acre excluded at settlement and 163 acres transferred to reserved forest.
		Do. C ...	105	...	...	105	...	...	No. 94 of 24th Feb. 1893.	
		Gúdalúr	2,744	...	...	2,744	...	...	No. 641 of 20th Sept. 1892.	Transferred to reserved forest.
		Mambakkam ...	766	...	...	766	...	...	No. 89 of 14th Feb. 1893.	40 acres deducted by rectification and 726 transferred to reserved forest.
	Chingleput ...	Melamaiyyur ...	49	...	...	...	49	...	.....	
		Achcharapakkam.	1,025 75	...	...	...	1,025 75	...	.....	
		Lattur	1,011	...	...	...	1,011	...	.....	
		Nedumaram ...	198	...	...	...	198	...	.....	
		Venmani ...	238	...	...	...	238	...	.....	
		Madayambakkam	241	...	...	...	241	...	.....	
		Sattamai	135	...	...	...	135	...	.....	
		Kattugudalur ...	2,064 1,805	...	...	...	2,064 1,805	...	.....	
		Rajupalliem ...	680 56	...	...	...	680 56	...	.....	
		Kurumbarai ...	237 192	...	...	...	237 192	...	.....	
		Endathur ...	271 11	...	...	...	271 11	...	.....	
		Tandalam, A and B	855 242	...	...	...	855 242	...	.....	
		Sirunallur ...	467 187	...	...	...	467 187	...	.....	
		Kannimangalam ...	142	...	...	...	142	...	.....	
		Nariamputtur ...	326	...	...	...	326	...	.....	
		Karukoli	600	...	...	...	600	...	.....	
		Kadalamangalam	731	...	...	...	731	...	.....	
		Vadatanur ...	1,078	...	...	...	1,078	...	.....	
		Vinayaganallur ...	127	...	...	...	127	...	.....	
		Kunamkolattur ...	106	...	...	...	106	...	.....	
		Bopanallur ...	538	...	...	...	538	...	.....	
		Muttukadu ...	86	...	...	...	86	...	.....	
		Indalur	424	...	...	...	424	...	.....	
		Poraiyur	123	...	...	...	123	...	.....	
		Gúdalúr	1,385	...	...	...	1,385	...	.....	
		Puragal	307	...	...	...	307	...	.....	
		Kaliyalam ...	1,165	...	...	...	1,165	...	.....	
		Oratti	348	...	...	...	348	...	.....	
		Irumbili	285	...	...	...	285	...	.....	
		Extension of Kolattur.	87	...	...	...	87	...	.....	
		Extension of Kayar.	470	...	...	...	470	...	.....	
	Saidapet ...	Madambakkam ...	567	...	...	...	567	...	.....	
	Tiruvallúr ...	Búdur, A	...	...	87	...	87	...	No. 336 of 25th July 1892.	
		Do. B	...	...	1	...	1	...		
		Irukulam Extension 1.	...	...	216	...	216	...	No. 403 of 22nd Aug. 1892.	
		Sathiavedu Extension 1.	...	...	381	...	381	...	No. 336 of 25th July 1892.	
		Sathiavedu Extension 2.	...	...	347	...	347	...		
		Sathiavedu Extension 3.	...	...	479	...	479	...		

Area of Reserved Lands, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and Date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		CENTRAL CIRCLE—*cont.*								
Chingleput—*cont.*	Tiruvallur.	Budur Extension I.	...	...	10	...	10	...	No. 336 of 25th July 1892.	
		Nemalur Extension I.	...	...	99	...	99			
		Sengiagaram ...	...	...	324	...	324	...	No. 64 of 2nd Feb. 1893.	
		Rajallah	...	...	131	...	131	...	No. 80 of 12th Feb. 1893.	
		Mopoorpalli ...	...	...	84	...	84	...	No. 70 of 2nd Feb. 1893.	
		Kambakkam Extension I.	...	...	318	..	318	...	No. 151 of 20th Mar. 1893.	
		Do. II.	...	...	610	...	610			
		Ambakkam Extension I.	...	...	80	...	80	...	No. 53 of 2nd Feb. 1893.	
		Do. II	...	...	98	...	98	...	No. 50 of 2nd Feb. 1893.	
		Do. III	...	...	294	...	294	...	No. 56 of 2nd Feb. 1893.	
		Do. IV	...	...	235	...	235	...	No. 58 of 2nd Feb. 1893.	
		Aradur Extention I.	...	...	288	...	288	...	No. 63 of 2nd Feb. 1893.	
		Do. II.	...	...	100	...	100	...	No. 71 of 2nd Feb. 1893.	
		Kodur Extension I.	...	...	94	...	94	...	No. 65 of 2nd Feb. 1893.	
		Do. II.	...	...	170	...	170	...		
		Do. III.	...	...	110	...	110	...		
		Allikuli Extension I	...	...	161	...	161	...	No. 69 of 2nd Feb. 1893.	
		Do. II.	...	...	93	...	93	...	No. 61 of 2nd Feb. 1893.	
		Do. III.	...	...	100	...	100	...	No. 66 of 2nd Feb. 1893.	
		Do. IV.	...	...	70	...	70	...	No. 79 of 2nd Feb. 1893.	
		Do. V.	...	...	99	...	99	...	No. 62 of 2nd Feb. 1893.	
		Do. VI.	...	...	129	...	129	...	No. 69 of 2nd Feb. 1893.	
		Do. VII.	...	...	258	...	258	...	No. 67 of 2nd Feb. 1893.	
		Palavakkam Extension. I.	...	...	736	...	736	...	No. 49 of 30th Jan. 1893.	
		Do. II.	...	...	294	...	294	...	No. 51 of 30th Jan. 1893.	
		Do. III.	...	...	110	...	110	...	No. 52 of 30th Jan. 1893.	
		Do. IV.	...	...	84	...	84	...	No. 54 of 30th Jan. 1893.	
		Do. V.	...	...	101	...	101	...	No. 57 of 30th Jan. 1893.	
		Do. VI.	...	...	117	...	117	...	No. 55 of 30th Jan. 1893.	
		Pulrambakkam Extension I.	...	...	127	...	127	...	No. 153 of 20th Mar. 1893.	
		Do. II.	...	...	295	...	295			
	Chingleput.	Nuvalur	...	...	338	...	338	...	No. 129 of 6th Mar. 1893.	
		Valuvadur ...	...	...	341	...	341	...	No. 155 of 18th Mar. 1893.	
		Karanai	...	...	672	...	672	...	No. 152 of 20th Mar. 1893.	
		Tirukalikuram Extension I.	...	...	975	...	975	...	No. 131 of 6th Mar. 1893.	
		Salur	...	...	1,231	...	1,231	...	No. 175 of 6th April 1893.	
		Total ...	31,163	48·69	10,887	5,395	36,655	57·27		

Area of Reserved Lands, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Central Circle—*cont.*									
North Arcot.		Veerasettipalle ...	7,587	...	...	7,587	...	...	Nos. 295 and 301 of 21st June 1892.	7,287 acres transferred to reserved forest and 300 acres excluded at settlement.
		Chittapara ...	4,850	...	...	4,850	...	...	No. 119 of 18th Mar. 1892.	600 acres excluded at settlement and 4,250 acres transferred to reserved forest.
	Chittoor ...	Irala	16,130	...	...	16,130	...	...	No. 22 of 10th Jan. 1893.	8 acres excluded at settlement and 16,122 acres transferred to reserved forest.
		Chittoor	360	...	...	...	360	...	.....	
		Bommasamudram.	1,242	...	...	1,242	...	...	No. 597 of 13th Dec. 1892.	Transferred to reserved forest.
		Vavilitola ...	2,495	...	...	2,495	...	...	No. 19 of 2nd Jan. 1893.	
		Tavanampalle ...	2,060	...	...	2,060	...	...	No. 597 of 13th Dec. 1892.	
		Putalapattu ...	2,917	...	...	2,917	...	...	No. 106 of 24th Feb. 1893.	
	Chandragiri ...	Nagaputla ...	8,320	...	...	...	8,320	...	.....	
		Mungilpattu ...	23,040	...	...	...	23,040	...	.....	
		Tirupati Hill extension.	5,840	...	...	...	5,840	...	.....	
	Palmanér ...	Pedunaigdrug ...	12,800	...	...	12,800	...	...	No. 524 of 8th Nov. 1892.	12,760 acres transferred to reserved forest and 40 acres excluded at settlement.
		Panamadangi ...	9,600	...	...	9,600	...	...	No. 91 of 29th Feb. 1892.	9,340 acres transferred to reserved forest and 260 acres excluded at settlement.
		Paradarami extension.	2,500	...	...	2,500	...	...	No. 139 of 4th April 1892.	600 acres excluded at settlement and 1,900 acres transferred to reserved forest.
	Gudiyattam ...	Sinnagunta ...	6,400	...	...	6,400	...	...	No. 445 of 13th Sept. 1892.	Transferred to reserved forest.
		Mordana extension.	9,600	...	...	9,600	...	...	No. 296 of 29th June 1892.	2 acres excluded at settlement and 9,598 acres transferred to reserved forest.
		Gundlapalli ...	8,420	...	...	...	8,420	...	.....	
		Pallalakuppam ...	6,212	...	...	6,212	...	...	No. 102 of 20th Feb. 1893.	
		Karapattu ...	8,388	...	...	...	8,388	...	.....	
		Ambur extension...	25,600	...	...	...	25,600	...	.....	
		Arasampet ...	18,000	...	* 13,480	...	31,480	...	.....	
	Vellore ...	Attiyur	4,880	...	...	4,880	...	...	No. 238 of 16th May 1892.	72 acres excluded at settlement and 4,808 cres transferred to reserved forest.
		Vellakal	5,280	...	...	...	5,280	...	.....	

* Rectification of area.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		CENTRAL CIRCLE—*cont.*								
North Arcot—*cont.*	Pólúr ...	Allialamangalam ...	10,062	...	...	10,062	...	...	No. 310 of 22nd June 1892.	35 acres excluded at settlement and 10,027 acres transferred to reserved forest.
		Santhavasal ...	8,500	...	...	...	8,500	...	.....	
		Mulakadu ...	17,000	...	...	...	17,000	...	.....	
	Arcot ...	Sholavaram ...	1,232	...	...	1,232	...	...	No. 118 of 27th Feb. 1892.	89 acres excluded at settlement and 1,143 acres transferred to reserved forest.
	Wálajápet ...	Amur	6,020	...	...	6,020	...	...	No. 311 of 22nd June 1892.	38 acres excluded at settlement and 5,982 acres transferred to reserved forest.
		Kolatur	1,779	...	...	1,779	...	...	No. 89 of 5th Mar. 1892.	50 acres excluded at settlement and 1,729 acres transferred to reserved forest.
		Minnel	1,378	...	...	1,378	...	...	.....	Abandoned.
	Wandiwash ...	Ponnur	935	...	...	935	...	...	No. 307 of 22nd June 1892.	166 acres excluded at settlement and 769 acres transferred to reserved forest.
		Nedungunam ...	1,797	...	...	1,797	...	..	No. 78 of 23rd Feb. 1892	100 acres excluded at settlement and 1,697 acres transferred to reserved forest.
		Nedungal ...	3,645	...	...	3,645	...	...	No. 512 of 1st Nov. 1892.	65 acres excluded and 3,580 acres transferred to reserved forest.
	Vellore ...	Javadi Hill Block, Arasampet and Naickaneri notified as Karuthamalai Block.	10,240	...	1,760	...	*12,000	...	No. 297 of 5th June 1893.	
	Chendragiri ...	Panapakam extension.	...	...	10,170	...	10,170	...	No. 522 of 4th Nov. 1892.	
		Chendragiri hills ...	...	...	1,000	...	1,000	...	No. 246 of 27th April 1893.	
		Sanambatla ...	...	...	5,000	...	5,000	...		
		Damencherla ...	...	...	2,500	...	2,500	...		
	Palmanér ...	Melmayi	...	...	960	...	960	...	No. 442 of 29th Sept. 1892.	
		Palmanér Reserve.	...	...	1,920	...	1,920	...	No. 223 of 26th April 1893.	
	Vellore ...	Vellore block ...	...	...	1,000	...	1,000	...	No. 234 of 1st May 1893.	
		Kaniyambadi block	...	...	1,500	...	1,500	...	No. 249 of 26th April 1893.	
		Pallikonda block ...	...	...	2,000	...	2,000	...	No. 248 of 26th April 1893.	

* Notified under section 4.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
North Arcot—*cont.*	Vellore—*cont.*	Nellimalai block	...	...	1,500	...	1,500	...	No. 233 of 26th April 1893.	
		Paravamalai do.	...	...	4,000	...	4,000	...		
		Kylasagiri	...	...	1,200	...	1,200	...		
	Pólúr	Periyamalai	...	...	5,400	...	5,400	...	No. 208 of 12th May 1892.	
		Paruvadamalai	...	...	4,000	...	4,000	...	No. 592 of 28th Nov. 1892.	
		Santavasal extension.	...	...	260	...	260	...	No. 228 of 1st May 1893.	
	Wallajah ...	Vedantangal	64	...	...	...	64	...	.....	
		Balakrishnapuram.	63	...	...	...	63	...	.....	
		Kattupakkam ...	145	...	...	...	145	...	.....	
		Ayal	16	...	...	...	16	...	.....	
		Banavaram ...	35	...	...	...	35	...	.....	
		Head Assistant Collector's office compound, Arkónam.	4	...	...	...	4	...	.....	
		Total ...	255,436	399·12	67,650	116,121	196,965	307·76		
South Arcot.	No. I, Tiruvannámalai.	Valasamalai ...	12,738	...	...	...	12,738	...	.....	
		Tenmalai ...	50,428	...	...	50,428	...	...	No. 323 of 12th July 1892.	Transferred to reserved forest.
		Pelamaradur ...	9,148	...	...	9,148	...	...	No. 324 of 12th July 1892.	
		Nallapattu ...	6,748	...	...	6,748	...	...	No. 325 of 12th July 1892.	
		Paramanandel ...	1,800	...	...	6	1,794	...	.....	Cut off at settlement.
		Ravandavadi ...	13,333	...	...	...	13,333	...	.....	
		Ponniar	50,000	...	...	...	50,000	...	.....	
		Nattampalle ...	7,333	...	...	...	7,333	...	.....	
		Radapuram ...	7,000	...	...	...	7,000	...	.....	
		Kannamadai ...	7,000	...	...	...	7,000	...	.....	
	No. II, Tindivanam.	Padipallam ...	4,394	...	...	...	4,394	...	.....	
		Pakkam	14,894	...	...	...	14,894	...	.....	
		Kurumpuram, 1st Bit.	500	...	...	500	...	...	No. 107 of 11th Mar. 1892.	Transferred to reserved forest.
		Naduvandur ...	2,800	...	...	...	2,800	...	.....	
	No. III, Villupuram.	Panampattu ...	600	...	...	600	...	...	No. 205 of 11th May 1892.	Do.
		Kappiyampilyur ...	660	...	...	660	...	...	No. 381 of 13th Aug. 1892.	
		Gangarampalaiyam	435	...	...	435	...	...	No. 520 of 8th Nov. 1892.	
		Pulanjimalai ...	600	...	...	600	...	...	No. 589 of 12th Dec. 1892.	
		Tandavasamudram.	2,112	...	...	...	2,112	...	.....	
	No. IV, Cuddalore.	Ramapuram ...	1,730	...	...	1,730	...	...	No. 346 of 1st Aug. 1892.	Do.
		Doni Durai ...	192	...	...	192	...	...	No. 516 of 8th Nov. 1892.	92 acres excluded at settlement and 100 acres transferred to reserved forest.
		Periyakuppam ...	1,683	...	...	...	1,683	...	.....	
	No. IV, Chidambaram.	Periyapattu ...	1,130	...	...	1,130	...	...	No. 447 of 13th Sept. 1892.	Transferred to reserved forest.
		Killai	1,185	...	...	1,185	...	...	No. 475 of 5th Oct. 1892.	25 acres excluded by rectification and 1,160 acres transferred to reserved forest.

Area of Reserved Lands, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
South Arcot—*cont.*	No. IV, Chidambaram—*cont.*	Pichavaram ...	2,515	...	...	2,515	...	...	No. 580 of 28th Nov. 1892.	26 acres excluded at settlement and 2,489 acres transferred to reserved forest.
		Wallajah	2,820	...	...	2,820	...	...	No. 32 of 16th Jan. 1893.	50 acres excluded and 2,770 transferred to reserved forest.
		Nayanur	1,800	...	...	1,800	...	...	No. 561 of 25th Dec. 1892.	Transferred to reserved forest.
		Adukkam	2,000	...	...	2,000	...	...	No. 131 of 21st Mar. 1892.	
		Attipakam ...	4,500	...	...	4,500	...	...	No. 11 of 13th Dec. 1892.	
		Samimalai, 1st Bit.	4,641	...	...	...	4,641	...	.....	
		Do. 2nd Bit.	5,330	...	...	5,330	...	...	No. 185 of 6th May 1892.	Transferred to reserved forest.
		Sidevi	2,800	...	...	2,800	...	...	No. 534 of 16th Nov. 1892.	
	No. V, Tirukkóyilúr.	Alwarmalai ...	8,950	...	...	8,950	...	...	No. 120 of 27th Feb. 1893.	150 acres excluded and 8,800 acres transferred to reserved forest.
		Sirupakam ...	1,080	...	...	1,080	...	...	No. 256 of 10th June 1892.	Transferred to reserved forest.
		Edakal	3,390	...	...	3,390	...	...	No. 211 of 10th May 1892.	
		Pandur	955	...	...	955	...	...	No. 131 of 21st Mar. 1892.	
		Perichanur ...	650	...	...	650	...	...	No. 234 of 26th May 1892.	
		Nattanur, 1st Bit.	4,500	...	...	4,500	...	...	No. 140 of 8th April 1892.	
		Do. 2nd Bit.	3,800	...	...	3,800	...	...	No. 133 of 22nd Feb. 1892.	
		Takarai	15,400	...	...	...	15,400	...	.....	
		Kanai	2,220	...	...	2,220	...	...	No. 260 of 10th June 1892.	Transferred to reserved forest.
		Pavunjipattu ...	4,500	...	...	...	4,500	...	.....	
	No. VI, Kallakurchi.	Rangappanur ...	2,200	...	...	2,200	...	...	No. 444 of 12th Sept. 1892.	Transferred to reserved forest.
		Mallapuram ...	1,025	...	...	1,025	...	...	No. 263 of 10th June 1892.	
		Kanankadu ...	3,520	...	...	130	3,390	...	.....	Cut off at settlement.
		Kottalammalai ...	2,880	...	...	2,880	...	...	.....	
		Kristnapuram ...	6,150	...	...	240	5,910	...	.....	Cut off at settlement.
		Nangur	1,625	...	...	1,625	...	...	No. 455 of 23rd Sept. 1892.	Transferred to reserved forest.
		Veppur	3,970	...	...	3,970	...	...	No. 104 of 13th Feb. 1896.	170 acres excluded and 3,800 acres transferred to reserved forest.
	No. VII, Vriddhachalam.	Kottanur	4,100	...	...	4,100	...	...	No. 596 of 12th Dec. 1892.	220 acres excluded and 3,880 acres transferred to reserved forest.
		Narasingamangalam.	835	...	...	835	...	...	No. 438 of 7th Sept. 1892.	Transferred to reserved forest.
		Karmangudi ...	1,170	...	...	20	1,150	...	.....	Cut off at settlement.
		Parur	2,660	...	...	2,660	...	...	No. 563 of 28th Nov. 1892.	Transferred to reserved forest.
		Sanakotai ...	6,270	...	...	...	6,270	...	.....	

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
South Arcot—*cont.*	No. VII, Vriddhachalam—*cont.*	Ammeri	1,350	...	...	500	850	...	.....	Cut off at settlement.
		Kuppanattam ...	840	...	...	840	...	...	No. 431 of 7th Sept. 1892.	Transferred to reserved forest.
		Kattumayilur ...	1,590	...	...	1,590	...	...	No. 460 of 23rd Mar. 1892.	3 acres excluded and 1,587 acres transferred to reserved forest.
	No. I, Tiruvannámalai.	Melchengam ...	2,000	...	..	400	1,600	...		Cut off when proposing under section 4.
		Pinjur	8,640	...	...	...	8,640	...		
		Munnurmangalam.	4,160	...	...	...	4,160	...		
		Eraiyurmalai ...	7,125	...	...	1,425	5,700	...		Do.
		Uchimalai ...	3,500	...	...	100	3,400	...	No. 292 of 10th June 1892.	Do.
		Pumalai	3,200	...	...	...	3,200	...		
		Rayandapuram ...	7,000	...	...	70	6,930	...		Do.
		Sennyampettai ...	3,720	...	...	...	3,720	...		
		Kanji	3,040	...	...	...	3,040	...		
		Gongampattu ...	1,920	...	...	...	1,920	...		
		Sorakolattur ...	7,600	...	...	...	7,600	...		
		Devanandal ...	2,000	...	...	20	1,980	...		Do.
		Kodambai	2,000	...	...	50	1,950	...		Do.
		Tachampattu ...	2,300	...	...	...	2,300	...		
	No. IV, Cuddalore.	Siruvattur... ...	212	...	...	...	212	...	No. 241 of 26th May 1892.	
		Ranganadapuram.	620	...	80	...	700	...		
		Puvamkuppam ...	640	...	...	20	620	...		Cut off when porposing under section 4.
	No. IV, Chidambaram.	Adivarahanallur ...	1,860	...	...	...	1,860	...	No. 241 of 26th May 1892.	
		Nisingán	800	...	...	...	800	...		
		Rampakkam ...	635	...	...	...	635	...		
		Kondapuram ...	972	...	...	...	972	...		
		Kolakudi ...	659	...	...	...	659	...		
	No. V, Tirukkóyilúr.	Velandai	1,200	...	...	...	1,200	...	No. 262 of 16th May 1892.	
		Sengamedu ...	755	...	...	...	755	...		
		Sittamur	1,510	...	...	...	1,510	...		
		Odiattur	1,696	...	...	...	1,696	...		Cut off when proposing under section 4.
		Emappur	340	...	...	5	335	...		
		Mambakkam ...	480	...	...	...	480	...		
		Elandurai	307	...	...	...	307	...		
		Tiruvannanallur ...	240	...	...	...	240	...		
		Kalamaradur ...	1,350	...	...	...	1,350	...		
		Kunjaram ...	5,090	...	...	...	5,090	...		
		Pachapalaiyam ...	1,600	...	...	...	1,600	...		
		Kallamedu ...	1,235	...	...	...	1,235	...		
	No. VI, Kallakurchi.	Rishivendiem ...	5,200	...	250	...	5,450	...	No. 264 of 30th May 1892.	
		Sittalur	1,000	...	...	...	1,000	...		
		Parasakurchi ...	950	...	30	...	980	...		
		Varanjaram ...	900	...	...	...	900	...		
		Magarur	1,440	...	...	...	1,440	...		
	No. VII, Vriddhachalam.	Periyanisalur ...	720	...	...	...	720	...	No. 262 of 16th May 1892.	
		Ivadagudi ...	650	...	...	...	650	...		
		Sattiyam ...	416	...	...	...	416	...		
		Vriddháchalam tank.	192	...	...	...	192	...		
		Kannapuram ...	1,800	...	400	...	2,200	...		
		Narimanam ...	640	...	110	...	750	...		
		Periyakurichi ...	360	...	10	...	370	...		
		Velankulam ...	1,390	...	...	...	1,390	...		
		Kattiyanallur ...	960	...	...	10	950	...		
	No. II, Tindivanam.	Annamangalam ...	...	...	700	...	700	...	No. 209 of 20th April 1893.	Cut off when proposing under section 4
		Vilukkam	...	...	410	...	410	...		
		Melsevur, 1st Bit...	...	...	730	...	730	...		

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		Central Circle—*cont.*								
South Arcot—*cont.*	No. II, Tindivanam—*cont.*	Melsevur, 2nd Bit.	...	...	380	.	380	...	No. 209 of 20th April 1893.	
		Edangalam ...	...	...	460	...	460	...		
		Olakkur	...	...	410	...	410	...		
		Perumukkal ...	...	...	150	...	150	...		
		Kilanjanur ...	...	...	340	..	340	...		
		Doni Durai, North Bit.	...	...	45	...	45	...	No. 167 of 6th April 1893.	
		Total ...	407,503	636·72	4,505	145,387	266,621	416·60		
Tanjore.	Northern Range.	Vettangudi ...	1,900	...	...	...	1,900	...	.....	
		Talanthondi ...	100	...	...	100	...	...	No. 450 of 22nd Sept. 1892.	Struck off.
		Karpalam ...	54	...	...	...	54	...	.....	
		Kadakkavinayaganellur.	90	...	...	...	90	...	.....	
		Ambanar, No. I ...	134	...	...	...	134	...	.....	
		Do. „ II ...	122	...	...	...	122	...	.....	
		Kaliyappanallur ...	20	...	...	...	20	...	.....	
	Southern Range.	Kodiyakadu, Point Calimere.	4,355	...	...	4,355	...	...	No. 188 of 4th May 1892.	151 acres excluded by rectification and 4,204 acres transferred to reserved forest.
		Edangankottai ...	193	...	* 1	194	...	...	No. 51 of 27th Jan. 1892.	
		Perumagalur ...	13	...	...	...	13	..	.....	
		Kalakudi	13	...	...	...	13	...	.....	
		Muthukurichi ...	10	...	...	...	10	...	.....	
		Anaikadu	10	...	...	...	10	...	.....	
		Vattagudi ...	10	...	...	...	10	...	.....	
		Alattur	10	...	...	...	10	...	.....	
		Kannugudi, No. I.	10	...	...	...	10	...	.....	
		Do. „ II.	266	...	...	...	266	...	.....	
		Pambathukadu ...	203	...	...	...	203	...	.....	
		Kathuvani Vakkanathi Reserve.	53	...	...	...	53	...	.....	
		Nannilam ...	2	...	...	...	2	...	.....	
		Melakadu ...	331	...	...	...	331	...	.....	
		Vendayampatti ...	231	...	...	...	231	...	.....	
		Kambyanatham ...	65	...	...	...	65	...	.....	
		Kurungulam No. I.	100	...	...	...	100	...	.....	
		Do. „ II.	141	...	...	...	141	...	.....	
		Tholaraputti ...	538	...	...	...	538	...	.....	
		Pinganmodu ...	116	...	...	...	116	...	.....	
		Vaduvur, No. I...	57	...	...	...	57	...	.....	
		Do. „ II...	94	...	...	...	94	...	.....	
		Do. „ III...	38	...	...	...	38	...	.....	
		Do. „ IV...	133	...	...	...	133	...	.....	
		Do. „ V...	124	...	...	...	124	...	.....	
		Do. „ VI...	146	...	...	...	146	...	.....	
		Do. „ VII...	212	...	...	...	212	...	.....	
		Sorapettai ...	70	...	...	...	70	...	.....	
		Ullikottai ...	130	...	...	...	130	...	.....	
		Total ...	10,094	15·77	1	4,649	5,446	8·51		
Trichinopoly.	Trichinopoly...	Ettarai	483	...	...	...	483	...	.....	
		Adavatur, No. I...	370	...	...	...	370	...	.....	
		Do. „ II...	331	...	...	...	331	...	.....	
		Velur	382	...	...	...	382	...	.....	
		Kotrapatti ...	211	...	...	...	211	...	.....	
		Natarajapuram ...	109	...	...	...	109	...	.....	
		Alandur	149	...	...	...	149	...	.....	
		Adavattur ...	144	...	...	...	144	...	.....	
		Punganur	281	...	...	...	281	...	.....	
		Pudur	143	...	...	...	143	...	.....	
	Kulittalai ...	Sekkonam... ...	119	...	...	...	119	...	.....	
		Mahadanapuram ...	191	...	...	...	191	...	.....	
		Pillapalaiyam ...	11	...	...	...	11	...	.....	
		Vengampatti ...	103	...	...	...	103	...	.....	

* Rectification of area.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Central Circle—*cont.*									
Trichinopoly—*cont.*	Kulittalai—*cont.*	Karuppur Reddipatti Hill.	4,112	...	...	4,112	...	...	No. 171 of 27th April 1892.	512 acres excluded at settlement and 3,600 acres transferred to reserved forest.
		Sivayam	108	...	...	...	108	...	.....	
		Neidalur	182	...	...	...	182	...	.....	
		Kilamanalmadu ...	131	...	...	...	131	...	.....	
		Nallur and Kallai Pothaikadu.	179	...	...	...	179	...	.....	
		Gudalur Pattuvade Kadu.	213	...	...	...	213	...	.....	
		Summareikadu Pothuravattampatti.	189	...	...	...	189	...	.....	
		Melavaliyur, Eastern block.	228	...	...	...	228	...	.....	
		Melavaliyur, Western block.	426	...	...	...	426	...	.....	
		Padiripati ...	413	...	...	...	413	...	.....	
		Perumal Pothaikadu (Vadaser and Kilavaliyur).	525	...	...	...	525	...	.....	
		Chinna Pillur Dharisu.	176	...	...	...	176	...	.....	
		K. Periapatti Kuppanarpattimel block.	269	...	...	...	269	...	.....	
		Mattaghiri Therkumedu.	455	...	...	...	455	...	.....	
		Tavalavirampatti Vyamalai Kilkadu	254	...	...	...	254	...	.....	
		Tavalavirampatti Kanam Kadu.	293	...	...	...	293	...	.....	
		Sokkanathanpatti Pothai (V. Periapatti).	93	...	...	...	93	...	.....	
		Amayapuram Perumaraikadu.	1,042	...	...	...	1,042	...	.....	
		Pannaipatti Perumalpothai.	478	...	...	...	478	...	.....	
		Kombadippatti ...	240	...	...	...	240	...	.....	
	Musiri ...	Omandur	321	...	...	...	321	...	.....	
		Tolayanatham and Kotharapatti.	333	...	...	...	333	...	.....	
		Tirutalaiyur ...	125	...	...	...	125	...	.....	
		Yedumalai ...	959	...	...	...	959	...	.....	
		Vellakalpatti ...	1,224	...	...	...	1,224	...	.....	
		Pulivalam ...	522	...	...	...	522	...	.....	
		Mavalapatti ...	1,010	...	...	...	1,010	...	.....	
		Visaltchiammall Samudram.	138	...	...	...	138	...	.....	
		Manmalai, Kanjurmalai and Uduvampattimalai.	3,000	...	* 3,000	6,000	...	...	No. 184 of 4th May 1892.	Transferred to reserved forest.
		Kanapadi Vannad.	10,000	...	...	10,000	...	...	No. 45 of 19th Jan. 1892.	
	Perambalúr ...	Kunnam	195	...	...	...	195	...	.....	
		Kottavasel ...	167	...	...	...	167	...	.....	
		Karaipadi	221	...	...	...	221	...	.....	
		Valaiyur Plateau ...	3,000	...	...	3,000	...	...	No. 189 of 29th Oct. 1891.	Struck off. Omitted to be excluded in 1891-92 report.
		Do. Slope ...	3,840	...	...	3,840	...	...		
		Udumbiyam ...	500	...	...	...	500	...	.....	
		Periyavenmani ...	138	...	...	...	138	...	.....	
		Tondapadi ...	276	...	...	...	276	...	.....	
		Anukur	487	...	...	...	487	...	.....	
		Malvoy	264	...	...	...	264	...	.....	
		Nossiyam	152	...	...	...	152	...	.....	
		Puduvettakudi ...	113	...	...	...	113	...	.....	
		Kallakudi	123	...	...	...	123	...	.....	

* Correction of area.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		CENTRAL CIRCLE—*cont.*								
Trichinopoly—*cont.*	Perambalúr—*cont.*	Attiyur	98	...	...	...	98	...	.....	
		Veppantatti ...	213	...	...	...	213	...	.....	
		Pasumbalur Therkukarai.	149	...	...	...	149	...	.....	
		Pasumbalur Vadakarai.	240	...	...	...	240	...	.....	
		Nunne	175	...	...	...	175	...	.....	
		Kolattur	116	...	...	...	116	...	.....	
		Ogalúr	190	...	...	...	190	...	.....	
		Sirukudal	166	...	...	...	166	...	.....	
		Saturbakam ...	352	...	...	...	352	...	.....	
		Kelapuliyur ...	229	...	...	...	229	...	.....	
		Neikuppei, No. I ...	154	...	...	...	154	...	.....	
		Do. ,, II.	90	...	...	...	90	...	.....	
		Yesanai	113	...	...	...	113	...	.....	
		Peramattur ...	658	...	...	...	658	...	.....	
		Mavalingai ...	260	...	...	...	260	...	.....	
		Pulambadi, No. I.	222	...	...	...	222	...	.....	
		Do. ,, II.	645	...	...	...	645	...	.....	
		Do. ,, III.	133	...	...	...	133	...	.....	
		Visvakudi ...	150	...	...	...	150	...	.....	
		Mattavarai ...	283	...	...	..	283	...	.....	
		Ariyur, No. I ...	290	...	...	...	290	...	.....	
		Do. ,, II ...	140	...	...	...	140	...	.....	
		Ladapuram ...	103	...	...	...	103	...	.....	
		Sittalai	404	...	...	...	404	...	.....	
		Sinnavadakarai ...	268	...	...	...	268	...	.....	
		Nuttapur	175	...	...	...	175	...	.....	
		Maikurambalur ...	269	...	...	...	269	...	.....	
		Sattanavadi ...	214	...	...	...	214	...	.....	
		Vengalam	361	...	...	...	361	...	.....	
		Kalpadi	300	...	...	...	300	...	.....	
		Venparur	1,024	...	...	...	1,024	...	.....	
		Paravai	150	...	...	...	150	...	.....	
		Nerkunam ...	1,253	...	...	...	1,253	...	.....	
		Tevanjur ...	253	...	...	...	253	...	.....	
		Mettupalaiyam ...	539	...	...	...	539	...	.....	
		Elambalur ...	214	...	...	...	214	...	.....	
		Maravattur ...	261	...	...	...	261	...	.....	
		Kanakasittur ...	310	...	...	...	310	...	.....	
		Peraiyur	856	...	...	...	856	...	.....	
		Vennarampundi ...	214	...	...	....	214	...	.....	
		Tiruvalandurai ...	197	...	...	...	197	...	.....	
		Birmadesam ...	273	...	...	...	273	...	.....	
		Kurumbalur ...	366	...	...	...	366	...	.....	
		Numbakurichi, No. I	328	...	...	...	328	...	.....	
		Do. ,, II	165	...	...	...	165	...	.....	
		Kilarasur	207	...	...	...	207	...	.....	
		Kilakkarai ...	119	...	...	...	119	...	.....	
		Yeraiyur and Naduvasal.	562	...	...	...	562	...	.....	
		Naduvasal ...	176	...	...	...	176	...	.....	
		Sirumattur ...	499	...	...	...	499	...	.....	
	Udaiyárpálaiyam.	Karaipakkam ...	83	...	...	83	...	...	No. 122 of 18th Mar. 1892.	Transferred to reserved forest.
		Tiruvenganur, Nos. I to V.		...	...	136	...	...	No. 118 of 18th Mar. 1892.	Do.
		Sattambadi, Nos. I to XI.		...	...	179	...	...	No. 123 of 18th Mar. 1892.	Do.
		Total ...	55,665	86·98	3,000	27,350	31,315	48·93		
Salem.	Átúr	Pattimedu ...	3,046	...	...	...	3,046	...	.....	
		Nagalúr	6,138	...	...	...	6,138	...	.....	
		Thumbal	3,680	...	...	...	3,680	...	.....	
		Mannur	4,000	...	...	...	4,000	...	.....	
		Pattimedu extension.	1,200	...	...	...	1,200	...	.....	
		Thumbal do.	4,800	...	...	...	4,800	...	.....	

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
		Central Circle—*cont.*								
Salem—*cont.*	Atur—*cont.* ...	Jadayagounden Slope.	11,220	...	...	...	11,220	...	.....	
		Gangavalle ...	7,040	...	...	...	7,040	...	.....	
		Varagur extension.	500	...	...	500	...	...	No. 254 of 30th May 1892.	14 acres excluded by rectification of area and 486 acres transferred to reserved forest.
	Salem ...	Kurumbapatti extension.	10,000	...	...	...	10,000	...	.....	
		Ramaswami Malai.	3,000	...	...	3,000	...	...	No. 404 of 19th Aug. 1892.	Transferred to reserved forest.
		Arasankad ...	2,500	...	...	2,500	...	...	No. 92 of 29th Feb. 1892.	
		Kaputu	3,500	...	...	3,500	...	...	No. 510 of 2nd Nov. 1892.	
		Pudupatti ...	7,500	...	...	7,500	...	...	No. 90 of 5th Mar. 1892.	
		Nagaramalai ...	1,280	...	...	...	1,280	...	.....	
		Saniyasimalai ...	600	...	...	600	...	...	No. 54 of 27th June 1892.	61 acres excluded by rectification of area and 539 acres transferred to reserved forest.
		Yelattur	2,000	...	...	...	2,000	...	.....	
		Kudimaduvu ...	4,307	...	...	4,307	..	...	No. 366 of 3rd Aug. 1892.	Transferred to reserved forest.
	Úttankarai ...	Kouramalai extension.	4,000	...	...	...	4,000	..	.....	
		Mukanur	8,000	...	...	...	8,000	...	.....	
		Thombakal extension.	3,840	...	...	3,840	...	...	No. 265 of 30th May 1892.	Transferred to reserved forest.
		Nochikuttai ...	7,917	...	...	7,917	...	...	No. 397 of 22nd Aug. 1892.	
		Kalnad	4,320	...	...	4,320	...	...	No. 202 of 10th May 1892.	
		Chitteri extension.	2,880	...	...	2,880	...	...	No. 255 of 30th May 1892.	
		Veppambatti ...	8,640	...	...	8,640	...	...	No. 242 of 26th May 1892.	
		Thirthamalai ...	11,046	...	...	11,046	...	...	No. 519 of 7th Nov. 1892.	
	Tiruppattúr ...	Vellakuttai ...	1,152	...	...	...	1,152	...	.....	
		Inner Javadi Block.	32,000	...	...	...	32,000	...	.....	
		Andiappanur, New Reserve.	7,500	...	...	...	7,500	...	.....	
	Úttankarai and Tiruppattúr.	Govindapuram ...	2,700	...	...	2,700	...	...	No. 402 of 19th Aug. 1892.	Transferred to reserved forest.
	Tiruppattúr and Krishnagiri.	Nandibanda ...	2,500	...	...	...	2,500	...	.....	
	Hosúr ...	Galigattam ...	6,080	...	...	6,080	...	...	No. 279 of 13th June 1892.	Transferred to reserved forest.
		Kestur extension ...	3,600	...	...	3,600	...	...	No. 280 of 13th June 1892.	
		Tali extension ...	4,320	...	...	4,320	...	...	No. 547 of 25th Nov. 1892.	
	Dharmapuri ...	Kesaraguli ...	6,400	...	...	6,400	...	...	No. 300 of 22nd June 1892.	
		Picklimalai ...	6,400	...	...	6,400	...	...	No. 261 of 30th May 1892.	
		Bathanavadi ...	27,000	...	...	27,000	...	...	No. 398 of 22nd Aug. 1892.	
		Kelapambadi ...	9,500	...	...	...	9,500	...	.....	
		Thoppur	7,000	...	...	7,000	...	...	No. 121 of 15th Mar. 1892.	Transferred to reserved forest.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		CENTRAL CIRCLE—*cont.*								
Salem—*cont.*	Krishnagiri ...	Maharajgudai ...	10,304	...	...	...	10,304	...	.....	
		Neralkota ...	7,040	...	(a) 100	7,140	...	...	No. 30 of 16th Jan. 1893.	(a) Added by correction of area. Transferred to reserved forest.
		Maharajgudai extension.	2,560	...	...	...	2,560	...	.....	
		Varatanapalli ...	2,216	...	...	...	2,216	...	.....	
		Thattakal ...	857	...	...	...	857	...	.....	
	Uttankarai ...	Karungal	4,320	...	...	...	4,320	...		
		Uttankarai, New ...	3,200	...	...	...	3,200	...		
		Wonnagiri... ...	2,944	...	...	...	2,944	...		
		Kallavi	4,160	...	...	...	4,160	...	.....	
		Poyyapatti ...	3,488	...	...	...	3,488	...	.....	
		Morappur ...	4,000	...	...	...	4,000	...	.....	
		Harur, New ...	1,901	...	...	...	1,901	...	.....	
		Kaladipatti ...	2,912	...	...	...	2,912	...	.....	
		Thenkaraikota ...	2,368	...	...	...	2,368	...	.....	
		Kouramalai ...	8,512	...	...	...	8,512	...	.....	
	Hosúr ...	Hulibanda ...	7,360	...	...	...	7,360	...	.....	
		Pani	5,856	...	...	...	5,856	...	.....	
		Kundukottai ...	4,768	...	...	...	4,768	...	.....	
		Sivanhalli ...	4,992	...	...	...	4,992	...	.....	
	Salem ...	Velampatti ...	3,500	...	..	...	3,500	...	.....	
		Kurichi	2,300	...	...	...	2,300	...	.....	
		Mallur	5,000	...	...	...	5,000	...	.....	
		Total ...	337,664	527·6	100	131,190	206,574	322·77	.....	
		Total of the Circle.	2,337,897	3,652·96	113,825	843,926	1,607,796	2,512·18	.....	
		SOUTHERN CIRCLE.								
Madura.	I. Cumbum ...	Kombai ...	3,840	...	...	3,840	...	...	No. 517 of 7th Nov. 1892.	Transferred to reserved forest.
		No. I, Vellaikaradu	198 442	...	...	...	(b) 198 442	...	(b) No. 321 of 23rd June 1892.	Notified under section 4.
		No. II, Sonaikaradu.	182	...	...	...	182	...	.....	
		No. III, Mottaikaradu.	320	...	* 70	...	390	...	No. 321 of 23rd June 1892.	
		No. IV, Kuttaikaradu.	125	...	...	...	125	...	.....	
		No. V, Nagarmalaikaradu.	118	...	...	...	118	...	.....	
		No. VI, Perumalkovilkaradu.	640	...	..	* 211	(c) 429	...	(c) No. 298 of 15th June 1892.	
		No. VII, Sanyasikovilkaradu.	283	...	...	...	283	...	.....	
		Nallatevanpatti ...	1,920	...	1,440	...	(d) 3,360	...	(d) No. 298 of 15th June 1892.	
	Tangedu ...	Certain lands on the Lower Palni Hills lying outside the limits of certain cultivated lands and cultivable waste.	1,203	...	...	...	1,203	...		
		Upper Palni Plantations.	...	...	(e) 47	(f) 47	...	...	(e) No. 298 of 15th June 1892. (f) No. 142 of 17th March 1893.	
		Manjakaraiar ...	50	...	...	...	50	...	.....	
		Kadavamalai ...	717	...	...	...	717	...	No. 278 of 15th June 1892.	Notified under section 4.

* By rectification of area.

Area of Reserved Lands, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Southern Circle—*cont.*									
Madura—*cont.*	Tangedu—*cont.*	Vanjankanal ...	15	...	...	...	15	...	.....	
		Vattilapatti ...	...	...	896	...	896	...	No. 298 of 15th June 1892.	
	II. Palni Hill.	Alayadikanal or Muliyur.	2,080	...	...	...	2,080	...	.....	
	Tangedu ...	Chikodikanal ...	20	...	...	...	20	...	.....	
		Koviladi	224	...	...	...	224	...	No. 278 of 15th June 1892.	
		Sirugammalai Block.	160	...	...	...	160	...		
		Talakodikadu ...	25	...	...	...	25	...	.....	
		Tinnikutukadu ...	1,600	...	...	...	1,600	...	.....	
		Poliyapattimalai ...	50	...	...	...	50	...	.....	
	Palni Hill ...	Periyasholakadu Elamalai or Umaiyar.	448	...	...	...	448	...	No. 278 of 15th June 1892.	
	Tangedu ...	Nedumbaraikadu.	19	...	...	...	19	...	.....	
	Palni Hill ...	Ponyettukanal or Kodavanai.	134	...	...	...	134	...	No. 278 of 15th June 1892.	
		Karadikuttu ...	...	...	1,035	...	1,035	...	No. 197 of 4th May 1892.	
		Manjapatti ...	...	...	2,560	...	2,560	...	No. 278 of 15th June 1892.	
	IV. Palamedu	Kiluvamalai ...	1,920	...	80	2,000	...	...	No. 46 of 22nd Jan. 1892.	Added at settlement. Transferred to reserved forest.
		Tiruparangundram	960	...	...	...	960	...	.....	
		Elephant Rock ...	640	...	...	...	640	...	.....	
		Ammanamalai ...	1,600	...	...	...	1,600	...	.....	
		Mutupattimalai ...								
		Vandiyoor Rock ...								
		Nagamalai ...	...	...	3,404	...	3,404	...	No. 197 of 4th May 1892.	
		Dhonikaradu ...	...	...	1,114	...	1,114	...		
		Sanglikaradu ...	...	...	275	...	275	...		
		Kuppuvamadi ..	...	...	1,312	...	1,312	...		
		Puvathukaradu ...	...	...	(*a*) 1,024	(*b*) 1,024	...	...	(*a*) No. 197 of 4th May 1892. (*b*) No. 148 of 20th Mar. 1893.	(*b*) Transferred to reserved forest.
		Ulmananai ...	...	...	122	...	122	...	No. 197 of 4th May 1892.	
		Boothakaradu ...	...	...	(*c*) 934	(*d*) 934	...	...	(*c*) No. 197 of 4th May 1892. (*d*) No. 603 of 12th Dec. 1892.	
	No. I, Cumbum Valley Range	Agamalai	...	...	3,673	...	3,673	...	No. 197 of 4th May 1892.	
		Pottaikaradu ...	...	...	147	...	147	...		
		Valkaradu ...	...	...	716	...	716	...		
		Pannymuthukaradu.	...	...	378	...	378	...		
		Sungakaradu ...	...	...	836	...	836	...	No. 321 of 23rd June 1892.	
		Shallimalaikaradu.	...	...	442	...	442	...	No. 197 of 4th May 1892.	
		Andipatti, N. ...	...	...	3,148	...	3,148	...		
		Do. C. & S.	...	...	6,768	...	6,768	...		
		Ambukaradu, I ...	...	...	358	...	4,025	...	No. 321 of 23rd June 1892.	
		Rajadani, II ...	...	...	2,720					
		Velayapatti, III ...	...	...	947					
		Perumaulkovil Karadu, IV.	...	...	442	...	442	...	No. 321 of 23rd June 1892.	
		Shangakaradu, V.	...	...	832	...	832	...		
		Munkaradu ...	...	...	2,150	...	2,150	...		
		Kuvakkapatti ...	...	...	115	...	115	...	No. 298 of 15th June 1892.	
		Kondrankimalai ...	...	...	316	...	316	...	No. 197 of 4th May 1892.	
	Tandigudy ...	Kuchukaradu ...	...	...	2,396	...	2,396	...	No. 321 of 23rd June 1892.	
		Rangamalai ...	...	...	998	...	998	...	No. 298 of 15th June 1892.	
		Karumalai ...	...	...	2,400	...	2,400	..		

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
	Southern Circle—*cont.*									
Madura—*cont.*	IV. Palamedu Range.	Sirumalai, N.W. slopes.	...	...	3,230	...	3,230	...	No. 197 of 4th May 1892.	
		Beerinjikaradu ...	...	...	243	...	243	...		
		Sembatti Hills ...	...	...	2,420	...	2,420	...	No. 235 of 13th May 1892.	
		Ponnamalai ...	...	...	998	...	998	...	No. 197 of 4th May 1892.	
		Sirumalai, N.E. slopes.	...	...	1,075	...	1,075	...	No. 321 of 23rd June 1892.	
		Parayankaradu ...	...	...	557	...	557	...	No. 197 of 4th May 1892.	
		Usilampatti ...	...	...	224	...	224	...	No. 298 of 15th June 1892.	
		Mundigamalai ...	...	...	557	...	557	...	No. 235 of 13th May 1892.	
		Kannatimalai ...	...	...	288	...	288	...	No. 298 of 15th June 1892.	
		Moonookaradu ...	...	...	275	...	275	...	No. 321 of 23rd June 1892.	
		Sanamalai ...	...	...	480	...	480	...		
		Perumalmalai, III.	...	...	525	...	525	...	No. 235 of 13th May 1892.	
		Nedumalai ...	...	...	1,088	...	1,088	...		
		Sakkimangalam ...	...	...	973	...	973	...		
		Perumalmalai ...	...	...	1,056	...	1,056	...		
		Vellamalai ...	...	...	550	...	550	...		
		Pappamalai ...	...	...	352	...	352	...	Do.	
		Erakalamalai ...	...	...	4,000	...	4,000	...	No. 197 of 4th May 1892.	
		Thoppaswamy Malai.	...	...	7,281	...	7,281	...		
		Mungilkaradu ...	...	...	1,760	...	1,760	...	No. 298 of 15th June 1892.	
		Bodumalai ...	...	...	435	...	435	...		
		Silakaradu ...	...	...	512	...	512	...	No. 321 of 23rd June 1892.	
		Nachukaradu ...	...	...	141	...	141	...		
		Sigankaradu ...	...	...	166	...	166	...		
		Muthugamalai ...	...	...	1,498	...	1,498	...	No. 197 of 4th May 1892.	
		Nedumkuttu ...	...	...	941	...	941	...	No. 235 of 13th May 1892.	
		Sethur Nedumalai.	...	...	397	...	397	...	No. 321 of 23rd June 1892.	
		Chinnapattikaradu.	...	...	816	...	816	...		
		Chitrakuttur ...	...	...	147	...	147	...		
		Kodangikuttu ...	...	...	4,000	...	4,000	...	No. 197 of 4th May 1892.	
	V. Kanavoipatti.	Mamalai	...	...	794	...	794	...	No. 235 of 13th May 1892.	
		Simmattukaradu ...	...	...	486	...	486	...		
		Karumalai ...	...	...	1,894	...	1,894	...	No. 298 of 15th June 1892.	
		Velacheripatti Hills	...	...	1,248	...	1,248	...	No. 235 of 13th May 1892.	
		Packrettimalai Hills	...	...	339	...	339	...	No. 298 of 15th June 1892.	
		Vellimalai Nedumalai.	...	...	1,005	...	1,005	...	No. 235 of 13th May 1892.	
		Ottarankuttu ...	...	...	410	...	410	...		
		Kaluvadi Malai ...	...	...	673	...	673	...		
		Vatamalai ...	...	...	512	...	512	...	No. 321 of 23rd June 1892.	
		Mangalapatti Karadu.	...	...	147	...	147	...		
		Seerangattupatti Karadu.	...	...	428	...	428	...		
		Malayandikuttu ...	...	...	154	...	154	...		
		Total ...	19,933	31·14	89,170	8,056	101,047	157·89		
Tinnevelly.	Tenkarai ...	Kudiraimalai ...	13,393	...	...	13,393	...	...	No. 309 of 21st June 1892.	
	Ottappidáram ...	Vaippar	813	...	....	...	813	...		
		Total ...	14,206	22·19	...	13,393	813	1·27		

Area of Reserved Lands, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		SOUTHERN CIRCLE—*cont.*								
North Coimbatore.	Satyamangalam.	Gutialatur ...	179,200	...	...	...	179,200	...	.....	
		Do. Extension.	..	...	5,760	...	5,760	...	No. 298 of 8th June 1893.	
	Talamalai ...	Talamalai Extension.	...	...	3,840	...	3,840	...		
	Kollegal ...	Yedaralli and Ponnachi.	435,200	...	...	142,080	334,080	...	(a) No. 295 of 7th June 1893, section 4.	(a) Area unreserved.
		Doddasampagai Extension.	(a)3,200							
		Cowdally Block ...	16,000							
		Hanur Block ...	21,760							
	Bhavání ...	Palamalai ...	28,160	...	...	...	28,160	...	.....	
		Burgur, North and South.	191,360 / 23,680	...	...	...	215,040	...	.....	
	Erode ...	.....	27,927	...	...	...	27,927	...	.....	
	Karúr ...	Karavalli	65	...	...	65	...	...	No. 320 of 9th July 1892.	Transferred to reserved forest.
		Thalanthupatti ...	59	...	...	59	...	...	No. 169 of 27th April 1892.	
		Molaipalaiyam ...	143	...	...	...	143	...	.....	
		Thottiyavadi ...	193	...	...	193	...	...	No. 302 of 22nd June 1892.	Do.
		Thalapatti ...	168	...	...	168	...	...	No. 521 of 7th Nov. 1892.	11 acres excluded and 157 acres transferred to reserved forest.
		Punjaikalakurichi.	81	...	...	81	...	...	No. 169 of 27th April 1892.	Transferred to reserved forest.
		Modukkur ...	118	...	...	118	...	...	No. 302 of 22nd June 1892.	
		Inanganur ...	212	...	...	212	...	...	No. 169 of 27th April 1892.	
		Komarapalaiyam...	112	...	...	112	...	...		
		Vandalmalai and Ranganmalai.	1,708	...	...	1,708	...	...	No. 573 of 6th Dec. 1892.	
		Kakkavadi Pichampatti.	179	...	...	179	...	...		
		Nerur	131	...	...	131	..	...	No. 302 of 22nd June 1892.	
	Dhárápuram...	Maravapalaiyam ...	84	...	...	...	84	...	.....	
		Sivamalai ...	100	...	...	100	...	...	No. 345 of 27th July 1892.	7 acres excluded and 93 acres transferred to reserved forest.
		Nadukandamedu ...	218	...	...	218	...	...	No. 488 of 7th Oct. 1892.	Transferred to reserved forest.
		Uthyur	1,024	...	...	...	1,024	...	.....	
		Pullakalipalaiyam.	66	...	...	66	..	...	No. 486 of 12th Oct. 1892.	Transferred to reserved forest.
		Settipalaiyam ...	95	...	...	95	...	...	No. 349 of 1st Aug. 1892.	
		Ganapathipalaiyam	80	...	...	80	...	...	No. 350 of 1st Aug. 1892.	
		Ponnapuram, 1st Bit.	272	...	...	272	...	...	No. 577 of 28th Nov. 1892.	
		Ponnapuram, 2nd Bit.	179	...	...	179	...	...		
		Kangayampalaiyam.	177	...	...	177	...	...	No. 363 of 11th Aug. 1892.	
		Selambampalaiyam.	177	...	...	177	...	...	No. 351 of 1st Aug. 1892.	18 acres excluded and 164 acres transferred to reserved forest.
		Ganapathy ...	432	...	...	432	...	...	No. 133 of 6th Mar. 1893.	5 acres excluded and 427 acres transferred to reserved forest.
		Thalavaipatnam ...	434	...	...	...	434	...	.....	
		Sennakalpalaiyam, 1st Bit.	103	...	...	...	103	...	.....	
		Sennakalpalaiyam, 2nd Bit.	101	...	(b) 1	102	...	...	No. 325 of 8th July 1892.	(b) Added by rectification of area. Transferred to reserved forest.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		SOUTHERN CIRCLE—*cont.*								
North Coimbatore—*cont.*	Dhárápuram—*cont.*	Pulikalkaradu ...	409	...	(a) 10	419	...	...	No. 134 of 6th Mar. 1893.	(a) Added by rectification. Transferred to reserved forest.
		Undarapatty, 1st Bit.	117	...	...	117	...	...	No. 345 of 27th July 1892.	Transferred to reserved forest.
		Undarapatty, 2nd Bit.	148	...	...	148	...	...		
		Manakadavu ...	323	...	...	323	...	...	No. 432 of 7th Sept. 1892.	
		Puthur	70	...	...	70	...	...	No. 20 of 9th Jan. 1893.	
		Kullakalipalaiyam.	89	...	...	89	...	...	No. 575 of 7th Dec. 1892.	2 acres excluded and 87 acres transferred to reserved forest.
		Akkarapalaiyam, 1st Bit.	64	...	...	64	...	...	No. 399 of 18th Aug. 1892.	Transferred to reserved forest.
		Akkarapalaiyam, 2nd Bit.	87	...	...	87	...	...		
		Thattanmedu ...	80	...	...	80	...	...	No. 349 of 1st Aug. 1892.	
		Manjampatti ...	203	...	...	...	203	...	.....	
		Yethelamalai ...	64	...	(b) 1	65	...	...	No. 349 of 1st Aug. 1892.	(b) Added by rectification. Transferred to reserved forest.
		Attamalai	646	...	...	646	...	...	No. 15 of 10th Jan. 1893.	Transferred to reserved forest.
		Periamanimalai ...	963	...	...	...	963	...	.....	
		Semmadaiparai ...	250	...	...	36	214	...	No. 349 of 1st Aug. 1892.	Do.
		Mammedu ...	183	...	...	183	...	...	No. 130 of 6th Mar. 1893.	
		Iyempalaiyam ...	116	...	...	116	...	...	No. 349 of 1st Aug. 1892.	
		Punnakkal ...	563	...	...	...	563	...	.....	
		Pulamvalasu ...	187	...	...	...	187	...	.....	
		Kannimarkoil ...	84	...	...	84	...	...	No. 10 of 22nd Dec. 1892.	Do.
		Punjaithalaiyur ...	58	...	...	58	...	...	No. 349 of 1st Aug. 1892.	
		Vellakoil	55	...	...	55	...	...	No. 497 of 17th Oct. 1892.	
		Total ...	* 937,957	1465·55	9,612	149,644	797,925	1246·76		
South Coimbatore.	Palladam ...	Alatur	237	...	...	...	237	...	.....	
		Ammapalaiyam ...	119	...	...	...	119	...	.....	
		Arasur	94	...	...	...	94	...	.....	
		Asanellipalayam ...	160	...	...	...	160	...	.....	
		Avanashi	55	...	...	...	55	...	.....	
		Ichipatti	639	...	...	...	639	...	.....	
		Iduvai	94	...	...	...	94	...	.....	
		Ittivirampalaiyam.	581	...	...	...	581	...	.....	
		Kadirampalaiyam.	185	...	...	...	185	...	.....	
		Kaduvettipalaiyam.	80	...	...	...	80	...	.....	
		Kalipalaiyam ...	123	...	...	...	123	...	.....	
		Kandampalaiyam.	92	...	...	...	92	...	.....	
		Kaniyampalaiyam.	156	...	...	...	156	...	.....	
		Kaniyur	813	...	...	...	813	...	.....	
		Karadibavi ...	50	...	...	...	50	...	.....	
		Karaipudur ...	92	...	...	...	92	...	.....	
		Karavalur ...	522	...	...	...	522	...	.....	
		Kurumbapalaiyam.	299	...	...	...	299	...	.....	
		Karumattampatti.	292	...	...	...	292	...	.....	
		Kodanjipalayam ...	121	...	...	...	121	...	.....	
		Kuppandapalayam.	69	...	...	...	69	...	.....	
		Kuttagam ...	582	...	...	...	582	...	.....	

* The difference of an acre between the closing balance of 1891–92 and the opening balance for 1892–93 is due to an error in calculation.

Area of Reserved Lands, 1892-93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		Southern Circle—*cont.*								
South Coimbatore—*cont.*	Palladam—*cont.*	Mangarasuvalaiyampalayam.	271	...	...	...	271	...	.....	
		Moparipalayam ...	163	...	...	...	163	...	.....	
		Naranapuram ...	556	...	...	...	556	...	.....	
		Narayampalli ...	51	...	...	...	51	..	.....	
		Nilambur	113	...	...	...	113	...	.....	
		Papakulam ...	103	...	...	...	103	...	.....	
		Paruvai	76	..	...	...	76	...	.....	
		Pattampalaiyam ...	79	...	...	...	79	...	.....	
		Perumanallur ...	159	...	...	...	159	...	.....	
		Perunkarunaipalayam.	53	...	...	...	53	...	.....	
		Pudupalaiyam ...	793	...	...	...	793	...	.....	
		Pulippar	72	...	...	...	72	...	.....	
		Puluvapatti ...	111	...	...	...	111	...	.....	
		Pumalur	291	...	...	...	291	...	.....	
		Rakkiyapalayam ...	278	...	...	...	278	...	.....	
		Samalapuram ...	52	...	...	...	52	...	.....	
		Settipalaiyam ...	159	...	...	...	159	...	.....	
		Senneripalayam ...	75	...	...	...	75	...	.....	
		Sokkanur	132	...	...	...	132	...	.....	
		Sokkampalayam ...	479	...	..	...	479	...	.....	
		Tandakarampalayam.	83	...	...	...	83	...	.....	
		Tattanur	289	...	...	...	289	...	.....	
		Tekkalur	389	...	...	...	389	...	.....	
		Taranallur ...	82	...	...	...	82	...	.....	
		Tulukamuttur ...	60	...	...	...	60	...	.....	
		Uppilipalayam ...	99	...	...	...	99	..	.....	
		Vadugapalayam ...	57	...	...	...	57	...	.....	
		Do. ...	293	...	...	...	293	...	.....	
		Vallipuram ...	52	...	...	...	52	...	.....	
		Velampalayam ...	81	...	...	...	81	...	.....	
		Do. ...	75	...	...	...	75	...	.....	
		Virapandi	175	...	...	...	175	...	.....	
	Udamalpet ...	Jambumalai ...	...	...	2,760	...	2,760	...	No. 114 of 20th Feb. 1893.	
		Andigoundanur ...	...	...	542	...	542	...		
		Elayamuthur ...	...	...	799	...	799	...		
		Dhalli	...	...	761	...	761	...		
		Total ...	11,256	17·59	4,862	...	16,118	25·18		
Nilgiris.	Sigur	Sigur	41,127	..	...	...	41,127	...	.....	
		Nanjanad ...	888	...	...	...	888	...	.....	
		Red Hills ...	48	...	...	48	...	...	No. 30 of 15th Jan. 1892.	
		Keradamund ...	276	..	...	276	...	...	No. 66 of 13th Feb. 1892.	
		Bigulihalla ...	46	...	...	46	...	...	No. 28 of 15th Jan. 1892.	
	Ootacamund...	Yadakad	117	...	...	117	...	...	No. 29 of 15th Jan. 1892.	
		Nanjanad addition, No. I.	9	...	...	...	9	...	.....	
		Nanjanad addition, No. II.	8	...	...	...	8	...	.....	
		Nanjanad addition, No. III.	10	...	...	...	10	...	.....	
	Coonoor ...	Honnathalai (South).	214	...	...	214	...	...	No. 152 of 12th April 1892.	
		Rallia	382	...	...	382	...	...	No. 81 of 23rd Feb. 1892.	
		Teppakuchi ...	115	...	...	115	...	...	No. 130 of 21st Mar. 1892.	
		Naduhatti ...	476	...	...	476	...	...	No. 79 of 23rd Feb. 1893.	
		Yercaudhalla ...	18	...	...	18	...	...	Nos. 113 & 114 of 15th Mar. 1893.	
		Konakarai Slopes.	1,864	...	...	1,864	...	...	No. 152 of 12th April 1892.	

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
	Southern Circle—*cont.*									
Nilgiris—*cont.*	Coonoor—*cont.*	Vagapanai ...	2,648	...	...	2,648	...	...	No. 152 of 12th April 1892.	
		Denad	2,073	...	...	2,073	...	...		
		Madanad	723	...	...	723	...	...		
		Kodanad Valley ...	294	...	...	294	...	...		
		Nedugula	89	...	...	89	...	...		
		Jakanare Slopes ...	6,419	...	...	6,419	...	...		
		Pillur Slopes ...	2,332	...	...	...	2,332	...	.....	
		Pakasuramalai ...	625	...	...	625	...	...	No. 348 of 1st Aug. 1892.	
		Pillur Shola ...	39	...	...	39	...	...		
		Kulear	226	...	...	226	..	...	No. 7 of 19th Dec. 1892.	
		Sutton Shola addition.	38	...	...	38	...	...	No. 355 of 29th July 1892.	
		Kolakombe ...	830	...	...	77	753	...	.....	Rectification of area.
		Taimalai Shola ...	50	...	...	50	...	...	No. 203 of 10th May 1892.	
		Tudur Shola ...	24	...	...	24	...	...	No. 198 of 10th May 1892.	
		Melur Slopes ...	4,429	...	124	...	4,553	...	.....	Rectification of area.
		Osatti	152	...	...	152	...	...	No. 337 of 23rd July 1892.	
		Koderu	21	...	...	...	21	...	... ..	
		Kilur	9	...	...	9	...	...	No. 586 of 12th Dec. 1892.	Struck off the list.
		Raliah Reserve addition.	3	...	...	3	...	...	No. 565 of 28th Nov. 1892.	
		Commandu Reserve addition.	32	...	...	32	...	...	No. 354 of 3rd Aug. 1892.	
		Teppakuchi Reserve addition.	4	...	...	4	...	...	No. 428 of 7th Sept. 1892.	
		Pillur Slopes Reserve addition.	896	...	...	...	896	...	.....	
	Mudumalai ...	Mudumalai ...	46,639	...	...	...	46,639	...	.....	
		Kumbarkolli ...	...	...	1,771	...	1,771	...	.....	Reserved land under section 26.
		Benne addition ...	...	...	123	...	123	...	No. 408 of 22nd Aug. 1892.	
	Sigur	Sigur additions ...	...	...	231	...	231	...	No. 187 of 4th May 1892.	
	Ootacamund...	Porthimund ...	...	...	6,983	...	6,983	...	No. 29 of 21st Jan. 1893.	
		Kundah addition, No. I.	...	...	5	...	5	...	No. 167 of 27th April 1893.	
		Kundah addition, No. II.	...	...	20	...	20	...		
		Kundah addition, No. III.	...	...	2,075	...	2,075	...		
		Kundah addition, No. IV.	...	...	668	...	668	...	No. 183 of 4th May 1892.	
		Hira Shige addition, No. I.	...	...	193	...	193	...	No. 299 of 8th June 1893.	
		Hira Shige addition, No. II.								
		Todaputta lands— Todanad ...	...	...	2,142	...	2,142	...	.....	Do.
		Kundahs ...	...	...	125	...	125	...	.....	
		Longwood addition, No. II.	...	...	* 31	31	...	...	No. 152 of 12th April 1892.	
	Coonoor ...	Paranginad ...	...	...	185	...	185	...	.....	Do.
		Merkunad	...	...	497	...	497	...	.....	
		Total ...	114,193	178·43	15,173	17,112	112,254	175·40		

* Omitted to be shown in previous year's returns.

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		SOUTHERN CIRCLE—*cont.*								
North Malabar.	Wynaad—*cont.*	Palepattur ...	746	...	...	...	746	...	.....	
		Vengur	5,470	...	...	...	5,470	...	.....	
		Chedlet	517	...	...	...	517	...	.....	
		Karpur	753	...	...	...	753	..	.....	
		Kalur	213	..	...	...	213	...	.....	
		Kudrakote ...	21,502	...	...	21,446	56	...	No. 559 of 24th Nov. 1892.	1,206 acres excluded by correction of area and 20,240 acres transferred to reserved forest.
		Padri	30,468	...	...	...	30,468	...	.....	
		Cardamom Forest.	13,683	...	...	...	13,683	...	.....	
		Kanot	25,600	...	...	...	25,600	...	.....	
		Chapparam ...	112	...	...	112	...	...	Board's Proceedings, No. 561 of 14th Oct. 1892.	Sec. 4 notification cancelled.
		Panniyatta ...	150	...	...	150	..	...		
		Total ...	99,214	155·02	...	21,708	77,506	121·10		
South Malabar.	Nilambúr ...	Nilambur Block ...	5,201	...	...	..	5,201	...	.....	Leased forests.
		Pokote	761	...	...	...	761	...	.....	
		Panangod	905	...	...	...	905	...	.....	
		Valluvasheri ...	932	...	...	...	932	...	.....	
		Kanaknt	669	...	...	...	669	..	.....	
		Erambadam ..	581	...	...	...	581	...	.....	
		Ambelakandi ...	1	...	...	...	1	...	.....	
		Arimbrahutamala.	322	...	...	...	322	...	.....	
		Mangalasheripa-ramba.	11	...	...	...	11	...	.....	
		Puttalatta and Ghittarikkal paramba.	8	...	...	...	8	...	.....	
		The Silent Valley.	17,280	...	...	...	17,280	...	.....	
	Amarampalam.	Muriat	1,765	...	...	...	1,765	...	.....	
		Karian	951	...	...	...	951	...	.....	
		The New Amarampalam Forest.	96,000	...	...	...	96,000	...	.....	
	Pálghat ...	Chathamkulamkarai paramba.	41	...	...	...	41	...	.....	
		Thamburattapottai *alias* Pilacheri Pallam.	137	..	...	13	124	...	.....	Struck off the list.
		Tiruvashamkannu *alias* Panakadam.	1,000	...	...	...	1,000	...	.....	
	Walúvanád ...	Block, No. II ...	24,320	...	...	...	58,240	...	.....	
		Do. III(*a*) ...	12,800							
		Block Nos. III (*b*), I and III (*b*), II.	4,480							
		Block Nos. IV (*a*), IV (*b*) and IV (*c*).	16,640							
	Nelambur ...	Beypore tope ...	...	...	57	...	57	...	.....	Reserved lands under sec. 26.
		Forest lands near Dhoni *alias* Plakatampully Paramba.	...	...	45	...	45	..	.....	
		Pullampully tope.	...	...	20	...	20	...	.....	
	Palghat ...	Echeat lands in Thiruvazhankunam.	...	...	1,230	...	1,230	...	.....	
		Total ...	184,805	288·76	1,352	13	186,144	290·85		
South Canara.	Coondapoor ...	Harkur Block ...	858	...	...	858	...	...	No. 16 of 10th Jan. 1893.	Transferred to reserved forest.
		Kasanakatte ...	262	...	...	262	...	...	No. 560 of 28th Nov. 1892.	
		Talaburane ...	611	...	...	...	611	...	.....	
		Gundaberpare ...	2,178	...	...	...	2,178	...	.....	

Area of Reserved Lands, 1892–93—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1892. Acres.	Area on 1st April 1892. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1893. Acres.	Area on 30th June 1893. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		Southern Circle—*cont.*								
South Canara—*cont.*	Coondapoor—*cont.*	Jennalane	657	...	...	657	...	...	No. 150 of 20th March 1893.	Transferred to reserved forest.
		Korakoppadahola.	433	...	...	...	433	...	.....	
		Harmannu ...	...	...	625	...	625	...	No. 191 of 7th May 1892.	
	Uppinangadi	Dharmastal Mundaji.	9,600	...	...	4,603	4,997	...	.....	Correction of area.
		Charmadi Kanapadi.	12,800	...	...	...	12,800	...	.....	
	Kásaragód ...	Parappa	2,560	..	...	2,560	...	...	No. 132 of 21st March 1892.	Transferred to reserved forest.
	Coondapoor ...	.....	139,002	...	...	...	139,002	...	.....	
	Udipi ...	.....	73,443	...	*400	...	73,843	...	.....	
	Mangalore ...	.....	27,693	...	2,725 *123	...	30,541	...	.....	Correction of area.
	Uppinangadi ...	.....	288,000	...	...	...	288,000	...	.....	
	Kásaragód ...	.....	38,040	...	...	...	38,040	...	.....	
		Total ...	596,137	931·47	3,873	8,940	591,070	923·54		
		Total of the Circle.	1,977,701	3,090·15	124,042	218,866	1,882,877	2,941·99		
		Grand Total of the three Circles.	6,018,546	9,403·97	688,007	1,745,971	4,960,582	7,750·90		

* Newly added.

ABSTRACT.

District.	AREA ON 1ST APRIL 1892.		ADDED DURING THE YEAR.	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 30TH JUNE 1893.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
NORTHERN CIRCLE.						
Ganjám	280,007	437·51	9,600	...	289,607	452·51
Vizagapatam	52,505	82·04	132,760	6,449	178,816	279·40
Gódávari	382,880	598·25	...	16,880	366,000	571·87
Kistna	137,966	215·57	121,849	117,699	142,116	222·06
Anantapur	206,749	323·05	34,565	50,014	191,300	298·91
Bellary	197,636	308·81	59,878	70,882	186,632	291·61
Kurnool	445,205	695·63	91,488	421,255	115,438	180·37
Total ...	1,702,948	2,660·86	450,140	683,179	1,469,909	2,296·73
CENTRAL CIRCLE.						
Nellore	209,809	327·83	1,705	52,580	158,934	248·33
Cuddapah	1,030,563	1,610·25	35,977	361,254	705,286	1,102·00
Chingleput	31,163	48·69	10,887	5,395	36,655	57·28
North Arcot	255,436	399·12	57,650	116,121	196,965	307·76
South Arcot	407,503	636·72	4,505	145,387	266,621	416·60
Tanjore	10,094	15·77	1	4,649	5,446	8·51
Trichinopoly	55,665	86·98	3,000	27,350	31,315	48·93
Salem	337,664	527·6	100	131,190	206,574	322·77
Total ...	2,337,897	3,652·96	1,138,25	843,926	1,607,796	2,512·18
SOUTHERN CIRCLE						
Madura	19,933	31·14	89,170	8,056	101,047	157·89
Tinnevelly	14,206	22·19	...	13,393	813	1·27
North Coimbatore	937,957	1,465·55	9,612	149,644	797,925	1,246·76
South Coimbatore	11,256	17·59	4,862	...	16,118	25·18
Nílgiris	114,193	178·43	15,173	17,112	112,254	175·40
North Malabar	99,214	155·02	..	21,708	77,506	121·10
South Malabar	184,805	288·76	1,352	13	186,144	290·85
South Canara	596,137	931·47	3,873	8,940	591,070	923·54
Total ...	1,977,701	3,090·15	124,042	218,866	1,882,877	2,941·99
Grand Total ...	6,018,546	9,403·97	688,007	1,745,971	4,960,582	7,750·90

Annual Form No. 60.

Forest Department, Madras Presidency.

Area of Plantations, 1892–93.

District.	Number of plantations.	On 1st April 1892.		Added during 1892–93.		On 30th June 1893.	
		Area.	Cost.	Area.	Cost.	Total area.	Total cost.
Regular plantations.		acs.	rs.	acs.	rs.	acs.	rs.
Northern Circle—							
Ganjám	..	..	..	..	..	..	..
Vizagapatam	..	..	..	..	..	..	..
Gódávari	4	137	9,911	3	764	140	10,675
Kistna	16	797	26,883	(a) — 1	2,244	796	29,127
Anantapur	..	..	.	..	..	..	..
Bellary	..	..	..	..	..	..	..
Kurnool	..	..	..	..	..	..	..
Total ..	20	934	36,794	2	3,008	936	39,802
Central Circle—							
Nellore	11	2,916	2,50,441	..	3,302	2,916	2,53,743
Cuddapah	8	2,100	51,712	..	658	2,100	52,370
Chingleput	6	396·09	34,112	..	1,706	396·09	35,818
North Arcot	5	1,035·	1,10,516	..	9,205	1,035·	1,19,721
South do.	15	1,917·05	1,12,832	3	4,111	1,920·05	1,16,943
Tanjore	7	1,308·	17,204	..	2,834	1,308	20,038
Trichinopoly	22	3,754·01	96,868	..	4,933	3,754·01	1,01,801
Salem	..	..	..	..	..	..	..
Total ..	74	13,426·15	6,73,685	3	26,749	13,429·15	7,00,434
Southern Circle—							
Madura	8	106·48	17,818	77·58	2,121	184·06	19,939
Tinnevelly	..	..	..	..	..	..	..
North Coimbatore	1	97	35,466	..	263	97	35,729
South do.	4	26·5	4,815	2	187	28·5	5,002
Nilgiris	19	1,887·50	1,17,290	13	3,479	1,900·50	1,20,769
North Malabar	1	41·50	4,468	..	336	41·50	4,804
South do.	16	4,069·75	2,58,730	130	11,619	4,199·75	2,70,349
South Canara	4	170·18	24,243	1·7	372	171·88	24,615
Total ..	53	6,398·91	4,62,830	224·28	18,377	6,623·19	4,81,207
Grand Total ..	147	20,759·06	11,73,309	229·28	48,134	20,988·34	12,21,443
Cultural operations.							
Northern Circle—							
Direction	..	..	279	..	..	..	279
Ganjám	4	370	2,041	33	740	403	2,781
Vizagapatam	..	..	..	..	..	..	..
Gódávari	..	..	..	..	..	..	..
Kistna	5	..	2,128	..	746	..	2,874
Anantapur	6	52·16	897	..	45	52·16	942
Bellary	3	..	561	4	285	4	846
Kurnool	..	..	82	..	56	..	138
Total ..	18	422·16	5,988	37	1,872	459·16	7,860
Central Circle—							
Direction	..	..	1,141	..	15	..	1,156
Nellore	8	757	3,938	42	590	799	4,528
Cuddapah	15	593	3,135	..	441	593	3,576
Chingleput	..	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..	..
South do.	3	1,326	1,658	..	106	1,326	1,764
Tanjore	20	1,155	2,069	..	60	1,155	2,129
Trichinopoly	10	mls. 100	30,924	..	1,238	mls. 100	32,162
Salem	..	..	..	..	..	..	..
Total ..	56	3,831 + mls. 100	42,865	42	2,450	3,873 + mls. 100	45,315
Southern Circle—							
Madura	2	..	357	..	35	..	392
Tinnevelly	17	2,014·20	4,294	303·92	2,495	2,318·12	6,789
North Coimbatore	..	..	..	..	..	..	..
South do.	..	..	508	..	..	..	508
Nilgiris	5	49	7,539	8	1,005	57	8,544
North Malabar	2	109	2,218	..	..	109	2,218
South do.	..	..	..	..	..	..	..
South Canara	..	..	38	..	..	..	38
Total ..	26	2,172·20	14,954	311·92	3,535	2,484·12	18,489
Grand Total ..	100	6,425·36 + mls. 100	63,807	390·92	7,857	6,816·28 + mls. 100	71,664

(a) Due to correction of area.

ANNUAL FORM No. 61.

Forest Department, Madras Presidency.

ANNUAL List of Topes and Experimental Gardens.

District.	Number.	Area.	Cost		Remarks.
			During year.	To end of year.	
Northern Circle.		ACS.	RS.	RS.	
Ganjám	7	101	..	922	
Vizagapatam	(a) 3	78	331	457	(a) One tope (22 acres) newly constituted.
Gódávari	..	..	..	..	
Kistna	7	53	184	2,438	
Anantapur	95	2,885	1,063	6,619	
Bellary	31	* 243	204	1,401	* Includes 3 acres omitted last year.
Kurnool	(b) 30	182	120	9,585	(b) 3 topes sub-divided and newly named.
Total ..	173	3,542	1,902	21,422	
Central Circle.					
Nellore	111	1,752	..	38,044	
Cuddapah	(c) 71	(c) 1,630	1,273	60,193	(c) Due to correction.
Chingleput	(d) 11	(c) 98·99	365	9,109	(d) One newly added.
North Arcot	(c) 179	(c) 3,069	4,302	40,497	
South do.	(e) 98	(e) 475	96	8,967	(e) Three topes (67 acres) added during the year.
Tanjore	16	153	..	..	
Trichinopoly	17	77	18	1,817	
Salem	263	3,061	523	2,00,298	
Total ..	766	10,315·99	6,577	3,58,925	
Southern Circle.					
Madura	22	89	..	18,883	
Tinnevelly	28	106	139	5,177	
North Coimbatore	183	14,032	..	29,067	
South do.	23	(c) 267·45	..	5,361	
Nilgiris	..	..	..	..	
North Malabar	1	20	188	3,394	
South do.	1	20	..	9	
South Canara	..	..	..	..	
Total ..	258	14,534·45	327	61,891	
Grand Total ..	1,197	28,392·44	8,806	4,42,238	

Annual Form No. 62.

Forest Department, Madras Presidency.

Area of Forest Tracts protected from Fire during 1892–93.

District.	Up to 31st March 1892.		During dry season of 1892–93.				Total cost up to 30th June 1893.
	Area actually protected.	Total cost.	Area attempted to be protected.	Fires.	Area actually protected.	Amount expended.	
Northern Circle.	acs.	rs.	acs.	acs.	acs.	rs.	rs.
Ganjám	117,563	7,410	129,290	984	128,306	2,319	9,729
Vizagapatam	56,305	1,070	62,065	..	62,065	895	1,965
Gódávari	111,441	2,157	139,013	1,214	137,799	2,121	4,278
Kistna	134,893	7,102	224,139	3,168	220,971	2,088	9,190
Anantapur	148,271	12,611	146,217	1,007	145,210	3,522	16,133
Bellary	63,660	21,750	72,853	606	72,247	4,319	26,069
Kurnool	50,200	7,878	66,140	6,658	59,482	3,927	11,805
Total ..	682,333	59,978	839,717	13,637	826,080	19,191	79,169
Central Circle.							
Nellore	117,535	4,488	117,060	8,804	108,256	1,236	5,724
Cuddapah	459,737	43,683	528,020	100,634	427,386	9,188	52,871
Chingleput	23,861	4,312	23,873	97	23,776	751	5,063
North Arcot	558,946	23,568	629,097	9,945	619,152	7,220	30,788
South do.	130,196	8,212	130,243	2,317	127,926	1,728	9,940
Tanjore	..	..	..	..	..	..	..
Trichinopoly	79,693	2,848	79,660	..	79,660	184	3,032
Salem	31,629	20,060	32,782	624	32,158	1,929	21,989
Total ..	1,401,597	1,07,171	1,540,735	122,421	1,418,314	22,236	1,29,407
Southern Circle.							
Madura	205,263	37,750	218,737	4,800	213,937	7,822	45,572
Tinnevelly	104,063	24,353	106,239	5,529	100,710	5,247	29,600
North Coimbatore ..	2,364	1,937	129,084	1,280	127,804	2,049	3,986
South do. ..	50,710	13,062	57,970	3,580	54,390	2,894	15,956
Nilgiris	190,005	21,301	223,087	3,430	219,657	1,593	22,894
North Malabar	15,408	7,938	33,462	1,275	32,187	1,835	9,773
South do.	103,344	16,796	103,474	..	103,474	2,711	19,507
South Canara	16,156	6,243	11,778	43	11,735	1,442	7,685
Total ..	687,313	1,29,380	883,831	19,937	863,894	25,593	1,54,973
Grand Total ..	2,771,243	2,96,529	3,264,283	155,995	3,108,288	67,020	3,68,549

ANNUAL FORM No. 63.

Forest Department, Madras Presidency.

PROSECUTIONS for Breaches of Forest Rules during 1892–93.

Districts.	Cases pending from 1891–92.	NEW CASES OF THE YEAR.					Total cases.	DISPOSED OF DURING THE YEAR.										Cases pending at close of the year.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Compounded.		Withdrawn.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle.																		
Ganjám	135	2	172	21	36	231	366	(*b*)113	319	(*c*) 79	295	..	..	..	..	192	614	174
Vizagapatam	90	..	720	30	14	764	854	530	744	47	71	244	362	7	7	828	1,184	26
Gódávari	6	..	55	3	568	626	632	225	262	30	75	13	13	..	..	268	350	364
Kistna	171	8	496	171	34	709	880	251	930	55	329	225	708	31	103	562	2,070	318
Anantapur	38	4	218	33	9	264	302	166	584	37	144	71	180	..	..	274	908	28
Bellary	5	..	166	155	39	360	365	260	627	59	210	31	(*e*) ..	..	..	350	837	15
Kurnool	23	3	271	71	29	374	397	215	627	138	538	35	166	..	..	388	1,331	9
Total ..	468	17	2,098	484	729	3,328	3,796	1,760	4,093	445	1,662	619	1,429	38	110	2,862	7,294	934
Central Circle.																		
Nellore	22	..	139	3	6	148	170	65	257	18	93	57	174	5	8	145	532	25
Cuddapah	178	9	444	222	38	713	891	303	638	60	205	248	354	..	..	611	1,197	280
Chingleput	25	2	36	256	4	298	323	70	94	23	49	200	484	28	26	321	653	2
North Arcot	73	10	248	473	153	884	957	230	322	134	544	518	809	54	(*e*) ..	936	1,675	21
South Arcot	491	1	725	267	97	1,090	1,581	423	1,134	95	430	543	1,817	333	1,031	1,394	4,412	187
Tanjore	3	..	36	18	2	56	59	9	28	4	7	30	87	9	53	52	175	7
Trichinopoly	63	..	401	497	48	946	1,009	100	234	(*d*) 65	134	741	1,337	..	..	906	1,705	103
Salem	(*a*) 32	39	532	297	165	1,033	1,065	502	1,521	130	867	302	1,003	88	407	1,022	3,798	43
Total ..	887	61	2,561	2,033	513	5,168	6,055	1,702	4,228	529	2,329	2,639	6,065	517	1,525	5,387	14,147	668
Southern Circle.																		
Madura	..	2	78	..	25	105	105	40	89	49	188	1	(*e*) ..	4	(*e*) ..	94	277	11
Tinnevelly. Under Forest Act ..	(*a*) 18	2	159	243	1	405	423	289	470	72	149	37	91	15	32	413	742	10
Tinnevelly. Under Penal Code ..	(*a*) 2	..	9	..	8	17	19	9	32	10	41	..	..	..	..	19	73	..
North Coimbatore	49	2	35	186	106	329	378	55	192	33	119	172	538	9	22	269	871	109
South Coimbatore	46	6	167	214	51	438	484	155	510	24	107	238	848	34	82	451	1,547	33
Nilgiris	36	5	73	105	23	206	242	37	75	14	61	145	356	19	79	215	571	27
North Malabar	..	1	35	7	21	64	64	13	21	3	7	37	72	..	..	53	100	11
South Malabar. Under Forest Act ..	1	..	10	..	..	10	11	9	17	1	1	1	2	..	..	11	20	..
South Malabar. Under Penal Code ..	..	..	3	..	1	4	4	2	4	2	3	..	..	..	..	4	7	..
South Canara	49	5	655	..	171	831	880	410	543	65	155	194	298	31	49	700	1,045	180
Total ..	201	23	1,224	755	407	2,409	2,610	1,019	1,953	273	831	825	2,205	112	264	2,229	5,253	381
Grand Total ..	1,556	101	5,883	3,272	1,649	10,905	12,461	4,481	10,274	1,247	4,822	4,083	9,699	667	1,899	10,478	26,694	1,983

(*a*) Correct figures as now reported by the Collector.
(*b*) Includes 23 cases compounded.
(*c*) Includes 20 cases withdrawn.
(*d*) Includes 9 cases withdrawn.
(*e*) The number of persons involved has not been stated.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Northern Circle.

Summary of Revenue of the different districts for 15 months ending 30th June 1893.

Budget heads.	Direction.	Ganjám.	Vizagapatam.	Gódávari.	Kistna.	Kurnool.	Bellary.	Anantapur.	Total.
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency –									
(*a*) Timber	..	4,286	24	14,898	431	2,873	3	44	22,559
(*b*) Firewood and charcoal ..	..	21	4	534	5,799	457	979	..	7,794
(*c*) Bamboos	..	5	..	..	..	323	..	..	328
(*d*) Sandal-wood	..	..	..	..	..	..	..	..	..
(*e*) Grass and other minor produce	178	1	..	276	9	934	100	130	1,628
II. Timber and other produce removed from the forests by consumers or purchasers—									
(*a*) Timber	..	17,999	2,519	29,471	21,875	37,204	7,980	6,458	1,23,506
(*b*) Firewood and charcoal ..	..	7,753	6,988	10,662	13,849	9,036	4,645	2,711	55,644
(*c*) Bamboos	..	8,186	5,895	35,560	503	16,605	1,656	204	68,609
(*d*) Grazing and fodder grass	..	2,642	75	4,356	45,425	10,846	3,943	1,559	68,846
(*e*) Other minor produce ..	..	3,739	3,382	9,029	19,293	9,519	26,004	15,319	86,285
III. Confiscated drift and waif-wood.	..	669	170	4,354	273	939	134	385	6,924
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..
V. Miscellaneous—									
(*a*) Fines and forfeitures ..	..	64	5	..	11	..	..	..	80
(*b*) Refunds	323	81	90	339	475	164	38	17	1,524
(*c*) Other sources	48	267	660	3,022	2,840	1,134	957	1,414	10,342
Total Receipts ..	549	45,713	19,812	1,12,501	1,10,783	90,034	46,436	28,241	4,54,069

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Central Circle.

Summary of Revenue of the different districts for 15 months ending 30th June 1893.

Budget heads.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	Total.
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber	..	2	16,799	57	8,625	174	1,311	..	..	26,968
(*b*) Firewood and charcoal ..	..	39,723	282	134	23,984	3,992	3,318	14,493	94	86,020
(*c*) Bamboos ..	..	112	123	..	2,430	349	180	..	..	3,194
(*d*) Sandal-wood ..	..	..	..	..	4,980	..	1	..	..	4,981
(*e*) Grass and other minor produce.	..	5,547	2,529	9	45	3	14	16	..	8,163
II. Timber and other produce removed from the forests by consumers or purchasers—										
(*a*) Timber ..	..	12,164	18,175	4,321	10,335	8,042	26,753	15,550	1,265	96,605
(*b*) Firewood and charcoal ..	..	2,562	19,857	10,393	33,772	28,952	31,934	14,569	8,574	1,50,613
(*c*) Bamboos ..	..	111	7,267	259	29,341	3,407	31,600	5,445	394	77,824
(*d*) Grazing and fodder grass..	..	15,055	10,954	5,403	11,669	8,623	18,300	5,303	687	75,994
(*e*) Other minor produce ..	..	14,904	79,546	24,878	53,986	42,744	49,735	26,907	6,158	2,98,858
III. Confiscated drift and waif-wood	..	52	854	132	439	500	1,538	432	6	3,953
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Miscellaneous—										
(*a*) Fines and forfeitures	..	..	38	78	36	303	368	..	..	823
(*b*) Refunds	315	1,401	279	28	1,693	47	170	1,348	65	5,346
(*c*) Other sources ..	30	569	3,789	896	6,798	4,099	2,893	3,378	1,805	24,257
Total Receipts ..	345	92,202	1,60,492	46,588	1,88,133	1,01,235	1,68,115	87,441	19,048	8,63,599

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Southern Circle.

Summary of Revenue of the different districts for 15 months ending 30th June 1893.

Budget heads.	Direction.	Nilgiris.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber ..	..	13,376	15	40,430	5,515	6,069	19,498	39,197	10,034	1,34,134
(*b*) Firewood and charcoal ..	..	22,952	..	1,496	2,474	7,061	..	38	5,888	39,909
(*c*) Bamboos ..	..	..	..	..	49	7	..	617	6	679
(*d*) Sandal-wood ..	..	10,400	24,714	..	..	..	..	..	..	35,114
(*e*) Grass and other minor produce.	..	710	..	7,796	..	429	84	872	29,446	39,337
II. Timber and other produce removed from the forests by consumers or purchasers—										
(*a*) Timber ..	..	3,927	6,534	5,294	12,031	6,731	4,644	3,987	2,444	45,592
(*b*) Firewood and charcoal ..	..	1,412	12,682	14,333	8,185	45,348	16	4,922	6,109	93,007
(*c*) Bamboos ..	..	2,496	10,298	6,457	1,262	1,705	591	1,681	1,336	25,776
(*d*) Grazing and fodder grass..	..	4,936	41,250	14,625	1,014	4,280	455	128	..	66,688
(*e*) Other minor produce ..	..	3,232	44,087	9,026	40,974	20,549	2,498	353	16,731	1,37,450
III. Confiscated drift and waif-wood	..	18	120	241	259	211	1	15	664	1,529
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Miscellaneous—										
(*a*) Fines and forfeitures	..	..	..	67	..	697	..	79	50	893
(*b*) Refunds ..	215	13	3	529	137	924	15	17	146	1,999
(*c*) Other sources ..	29	1,868	4,994	4,582	1,935	2,451	2,715	3,585	3,884	26,043
Total Receipts ..	244	65,340	1,44,697	1,04,876	73,835	96,462	30,517	55,441	76,738	6,48,150

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

Annual Form No. 64.

Forest Department, Madras Presidency, Northern Circle.

Summary of Expenditure of the different districts for 15 months ending 30th June 1893.

Budget heads.	Direction.	Ganjám.	Vizagapatam.	Gódávari.	Kistna.	Kurnool.	Bellary.	Anantapur.	Total.
A.—Conservancy and Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—									
(*a*) Timber	..	2,731	7	2,196	128	1,656	1	..	6,719
(*b*) Firewood and charcoal	..	..	..	529	2,690	925	729	..	4,873
(*c*) Bamboos	..	..	..	..	..	64	..	..	64
(*d*) Sandal-wood ..	..	..	..	..	..	..	..	..	..
(*e*) Grass and other minor produce ..	..	..	113	789	2	427	116	118	1,565
II. Timber and other produce removed from the forests by consumers or purchasers	194	4,239	2,515	8,440	4,645	9,897	1,024	1,808	32,762
III. Confiscated, drift and waif-wood	..	1,111	24	1,326	31	29	9	..	2,530
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..
V. Rent of leased forests, and payments to share-holders in forests managed by Government	..	..	..	..	..	..	12,500	..	12,500
VI. Live-stock, stores, tools and plant—									
(*a*) Purchase of cattle ..	..	..	..	..	..	..	..	..	..
(*b*) Feed and keep of cattle	870	1,414	41	791	..	..	..	..	3,116
(*c*) Stores, tools and plant	2	144	479	396	274	91	128	1	1,515
VII. Communications and buildings—									
(*a*) Roads and bridges..	..	1,816	..	529	1,600	2,968	281	665	7,859
(*b*) Buildings	..	2,830	248	1,640	1,251	4,741	226	816	11,754
(*c*) Other works ..	..	83	..	131	274	71	..	..	559
VIII. Demarcations, improvement and extension of forests—									
(*a*) Demarcation ..	..	1,762	1,068	1,248	2,239	611	1,533	1,769	10,230
(*b*) Compensation for land and rights ..	..	..	25	107	31	..	327	306	796
(*c*) Surveys and working plans	31	908	357	1,394	1,517	1,358	840	1,710	8,115
(*d*) Plantations ..	..	740	331	764	3,174	176	489	1,108	6,782
(*e*) Protection from fire.	..	2,319	895	2,121	2,088	3,927	4,319	3,522	19,191
(*f*) Other works ..	..	607	7	..	2,514	64	1,728	158	5,078
IX. Miscellaneous—									
(*a*) Refunds	..	20	9	671	871	114	529	78	2,292
(*b*) Law charges ..	2	79	..	1	53	..	49	..	184
(*c*) Other charges ..	30	43	2	95	1,264	60	18	..	1,512
Total A.—Conservancy and works..	1,129	20,846	6,121	23,168	24,646	27,179	24,848	12,059	1,39,996

Madras,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

Annual Form No. 64.

Forest Department, Madras Presidency, Central Circle.

Summary of Expenditure of the different districts for 15 months ending 30th June 1893.

Budget heads.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	Total.
A.—Conservancy and Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber ..	..	27	1,715	10	2,668	48	1,393	97	..	5,958
(*b*) Firewood and charcoal ..	..	29,143	682	31	13,762	2,442	2,192	7,852	..	56,104
(*c*) Bamboos ..	..	114	60	..	1,131	..	92	..	..	1,397
(*d*) Sandal-wood ..	..	..	..	..	407	11	489	..	..	907
(*e*) Grass and other minor produce ..	..	2,866	1,489	..	285	8	71	2	..	4,721
II. Timber and other produce removed from the forests by consumers or purchasers ..	194	938	6,678	1,663	2,481	3,117	13,467	2,413	561	31,512
III. Confiscated, drift and waif-wood	..	19	63	25	10	35	168	8	6	334
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government	..	..	..	..	..	..	10	..	..	10
VI. Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle	..	..	38	..	..	..	..	..	..	38
(*b*) Feed and keep of cattle ..	..	..	..	..	..	..	..	..	..	..
(*c*) Stores, tools and plant ...	74	2,329	525	100	22	418	357	9	..	3,834
VII. Communications and buildings—										
(*a*) Roads and bridges ..	..	..	1,701	175	939	750	1,915	382	..	5,882
(*b*) Buildings ..	..	84	2,598	158	4,985	1,982	4,573	187	37	14,604
(*c*) Other works ..	..	..	69	..	1,216	69	2	..	..	1,356
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	3,429	5,077	3,025	15,447	3,741	3,532	3,678	295	38,224
(*b*) Compensation for land and rights ..	..	7,200	365	45	7,310	62	2,125	..	..	17,107
(*c*) Surveys and working plans ..	1,578	1,023	1,280	444	1,130	1,263	1,178	320	440	8,656
(*d*) Plantations ..	15	3,892	2,372	2,071	13,507	4,313	523	6,189	2,894	35,776
(*e*) Protection from fire	..	1,236	9,188	751	7,220	1,728	1,929	184	..	22,236
(*f*) Other works ..	..	788	740	2,786	11,345	5,939	8,396	5,325	2,413	37,732
IX. Miscellaneous—										
(*a*) Refunds	..	1,212	305	400	415	364	242	311	492	3,741
(*b*) Law charges ..	..	..	43	1	7	15	261	..	..	327
(*c*) Other charges ..	42	70	62	4	107	266	230	..	..	781
Total A.—Conservancy and works ..	1,903	54,370	35,050	11,689	84,394	26,571	43,145	26,957	7,138	2,91,217

Madras,
29th August 1893.

(Signed) R. Morris,
Deputy Accountant-General.

ANNUAL FORM, No. 64.

Forest Department, Madras Presidency, Southern Circle.

Summary of Expenditure of the different districts for the 15 months ending 30th June 1893.

Budget heads.	Direction.	Nilgiris.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
A.—Conservancy and Works.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber ..	..	2,300	5	17,377	3,792	7,830	1,328	9,698	7,795	50,125
(*b*) Firewood and charcoal ..	..	14,217	..	482	3,835	2,230	..	..	3,159	23,923
(*c*) Bamboos ..	..	..	..	..	7	16	..	8	..	31
(*d*) Sandalwood ..	..	964	1,826	..	..	..	..	..	..	2,790
(*e*) Grass and other minor produce	..	261	1	5,101	..	108	9	345	16,977	22,802
II. Timber and other produce removed from the forests by consumers or purchasers ..	194	1,594	9,044	4,575	2,065	4,984	102	95	4,263	26,916
III. Confiscated drift and waif-wood	..	11	45	12	23	18	..	1	11	121
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests, and payments to shareholders in forests managed by Government	..	9,000	..	3,750	..	..	..	1,885	..	14,635
VI. Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle ..	..	..	..	333	..	..	443	629	..	1,405
(*b*) Feed and keep of cattle ..	..	1,248	..	4,918	230	..	3,340	7,700	..	17,436
(*c*) Stores, tools and plant ..	30	574	189	405	669	531	602	367	300	3,667
VII. Communications and buildings—										
(*a*) Roads and bridges ..	..	1,136	5,480	1,296	2,891	11,305	1,004	453	..	23,565
(*b*) Buildings ..	..	2,186	3,575	4,829	10,230	9,786	1,624	568	239	33,037
(*c*) Other works ..	..	144	..	504	551	421	38	52	..	1,710
VIII. Demarcations, improvement and extension of forests—										
(*a*) Demarcation ..	..	2,302	3,664	3,469	10,744	2,817	1,084	52	1,218	25,350
(*b*) Compensation for land and rights ..	..	2,280	..	..	20	38	3,140	2	..	5,480
(*c*) Surveys and working plans	57,891	1,047	624	817	431	2,656	102	172	2,497	66,237
(*d*) Plantations ..	..	4,484	263	187	2,156	2,634	524	11,619	372	22,239
(*e*) Protection from fire	..	1,593	2,049	2,894	7,822	5,247	1,885	2,711	1,442	25,593
(*f*) Other works ..	..	408	320	1,144	3,826	6,007	299	1,068	1,029	14,101
IX. Miscellaneous—										
(*a*) Refunds ..	..	55	1,092	53	265	982	271	..	165	2,883
(*b*) Law charges ..	..	..	2	8	..	9,661	..	21	1	9,693
(*c*) Other charges ..	27	296	204	809	234	83	210	39	675	2,577
Total A.—Conservancy and works ..	58,142	46,100	28,383	52,963	49,791	67,354	15,955	37,485	40,143	3,96,316

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Northern Circle.

Summary of Expenditure of the different districts for 15 months ending 30th June 1893.

Budget heads.	Direction.	Ganjám.	Vizagapatam.	Gódávari.	Kistna.	Kurnool.	Bellary.	Anantapur.	Total.
B.—"*Establishments.*"	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward, Total A. "Conservancy and works" ..	1,129	20,846	6,121	23,168	24,646	27,179	24,848	12,059	1,39,996
I.—Salaries—									
(*a*) Conservators	18,768	..	..	..	..	..	..	..	18,768
(*b*) Superior officers ..	16,857	11,305	5,831	7,409	9,066	11,733	3,810	5,240	71,251
(*c*) Subordinate forest and depôt establishments..	1,373	4,603	2,870	8,788	8,822	9,946	6,260	6,745	49,407
(*d*) Office establishments ..	16,197	2,052	1,181	2,475	2,812	2,889	1,650	1,831	31,087
(*e*) Deputation and special allowances	532	..	..	..	..	..	..	..	532
II.—Travelling allowances—									
(*a*) Conservators	4,586	..	..	..	..	..	..	..	4,586
(*b*) Superior officers ..	3,570	1,554	1,275	1,428	2,060	2,236	1,180	1,201	14,504
(*c*) Subordinate forest and depôt establishments..	748	1,655	608	2,826	2,488	4,156	1,345	1,868	15,694
(*d*) Office establishments ..	2,103	370	303	502	1,111	670	269	402	5,730
III.—Contingencies—									
(*a*) Stationery	..	..	..	..	..	..	..	..	..
(*b*) Carriage of tents and records..	728	92	171	101	567	357	191	190	2,397
(*c*) Rents, rates and taxes..	600	249	141	285	1	3	40	2	1,321
(*d*) Pay of police guards ..	..	..	..	..	..	..	..	..	..
(*e*) Official postage	798	354	246	535	1,059	687	545	410	4,634
(*f*) Sundries	1,320	482	465	717	991	704	715	935	6,329
Total B.—"Establishments." ..	68,180	22,716	13,091	25,066	28,977	33,381	16,005	18,824	2,26,240
Grand Total of Expenditure ..	69,309	43,562	19,212	48,234	53,623	60,560	40,853	30,883	3,66,236

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Central Circle.

Summary of Expenditure of the different districts for 15 months ending 30th June 1893.

Budget heads.	Direction.	Nellore.	Cuddapah.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	Total.
B.—"Establishments."	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward, Total A. "Conservancy and Works"	1,903	54,370	35,050	11,689	84,394	26,571	43,145	26,957	7,138	2,91,217
I.—Salaries—										
(*a*) Conservators ..	24,000	..	..	..	..	..	..	..	..	24,000
(*b*) Superior officers ..	16,990	10,186	14,671	6,142	6,653	7,886	16,450	13,670	..	92,648
(*c*) Subordinate forest and depôt establishments ..	3,805	8,406	13,570	3,723	12,607	11,461	14,438	4,561	1,260	73,831
(*d*) Office establishment	17,641	2,940	3,595	1,561	3,926	3,630	3,557	2,251	1,277	40,378
(*e*) Deputation and special allowances	532	..	..	..	..	136	..	..	..	668
II.—Travelling allowances—										
(*a*) Conservators ..	3,679	..	..	..	..	..	..	..	..	3,679
(*b*) Superior officers ..	4,794	1,450	2,721	1,553	1,935	1,361	3,065	1,879	457	19,215
(*c*) Subordinate forest and depôt establishments ..	1,939	1,996	3,476	1,054	3,957	2,897	4,641	1,762	414	22,136
(*d*) Office establishments	2,586	407	656	176	748	649	508	611	274	6,615
III.—Contingencies—										
(*a*) Stationery	..	2	..	..	..	..	..	..	..	2
(*b*) Carriage of tents and records ..	924	269	165	119	224	225	464	197	116	2,703
(*c*) Rents, rates and taxes	4	..	55	8	5	768	28	71	1	940
(*d*) Pay of police guards	..	..	..	..	..	..	..	..	..	..
(*e*) Official postage ..	828	259	594	377	1,227	1,148	1,536	598	245	6,812
(*f*) Sundries	3,306	1,201	1,633	621	1,128	1,187	1,118	220	84	10,498
Total B.—"Establishments"	81,028	27,116	41,136	15,334	32,410	31,348	45,805	25,820	4,128	3,04,125
Grand Total of Expenditure	82,931	81,486	76,186	27,023	1,16,804	57,919	88,950	52,777	11,266	5,95,342

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 64.

Forest Department, Madras Presidency, Southern Circle.

Summary of Expenditure of the different districts for 15 months ending 30th June 1893.

Budget heads.	Direction.	Nilgiris.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
B.—"Establishments."	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward, Total A. "Conservancy and Works"	58,142	46,100	28,383	52,963	49,791	67,354	15,955	37,485	40,143	3,96,316
I.—Salaries—										
(*a*) Conservators ..	19,064	..	..	..	..	..	..	..	..	19,064
(*b*) Superior officers ..	6,890	13,494	11,289	5,188	13,500	9,431	7,354	12,000	6,270	85,416
(*c*) Subordinate forest and depot establishments ..	4,768	9,818	7,074	9,948	11,892	10,138	7,328	5,880	6,614	73,460
(*d*) Office establishments	13,960	2,774	3,235	3,484	2,847	3,536	3,250	2,038	2,681	37,805
(*e*) Deputation and special allowances	532	..	..	..	..	..	..	..	..	532
II.—Travelling allowances—										
(*a*) Conservators ..	3,986	..	..	..	..	..	..	..	..	3,986
(*b*) Superior officers ..	1,330	1,589	2,569	1,423	3,041	3,104	917	1,019	1,425	16,417
(*c*) Subordinate forest and depot establishments ..	2,127	1,959	2,291	2,759	4,170	3,314	1,503	1,464	2,103	21,690
(*d*) Office establishments	1,140	54	539	470	917	824	118	161	351	4,564
III.—Contingencies—										
(*a*) Stationery ..	..	..	..	..	..	..	..	..	..	..
(*b*) Carriage of tents and records ..	483	2	383	201	373	281	35	16	351	2,125
(*c*) Rents, rates and taxes	720	106	163	102	16	76	..	12	54	1,249
(*d*) Pay of police guards	..	..	..	..	..	..	..	..	..	..
(*e*) Official postage ..	820	267	562	449	842	972	177	193	1,076	5,358
(*f*) Sundries	3,282	787	971	860	945	963	509	396	655	9,368
Total B.—"Establishments"	59,102	30,850	29,076	24,884	38,543	32,639	21,191	23,169	21,580	2,81,034
Grand Total of Expenditure	1,17,244	76,950	57,459	77,847	88,334	99,993	37,146	60,654	61,723	6,77,350

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM NO. 64.

Forest Department, Madras Presidency.

GRAND TOTAL of the Presidency.

Budget heads. Receipts.	RS.	Budget heads. Expenditure—A. Conservancy and Works.	RS.	Budget heads. Expenditure—B. Establishments.	RS.
I. Timber and other produce removed from the forests by Government Agency—		I. Timber and other produce removed from the forests by Government Agency—		Brought forward, Total, A. Conservancy and Works	8,27,529
(*a*) Timber ..	1,83,661	(*a*) Timber	62,802		
(*b*) Firewood and charcoal ..	1,33,723	(*b*) Firewood and charcoal	84,900	I. Salaries—	
(*c*) Bamboos ..	4,201	(*c*) Bamboos	1,492	(*a*) Conservators ..	61,832
(*d*) Sandalwood ..	40,095	(*d*) Sandalwood ..	3,697	(*b*) Superior officers..	2,49,315
(*e*) Grass and other minor produce.	49,128	(*e*) Grass and other minor produce ..	29,088	(*c*) Subordinate forest and depôt establishments ..	1,96,698
II. Timber and other produce removed from the forests by consumers or purchasers—		II. Timber and other produce removed from the forests by consumers or purchasers	91,190	(*d*) Office establishments	1,09,276
(*a*) Timber ..	2,65,703	III. Confiscated drift and waifwood	2,985	(*e*) Deputation and special allowances	1,732
(*b*) Firewood and charcoal ..	2,99,264	IV. Revenue from forests not managed by Government	..	II. Travelling allowances—	
(*c*) Bamboos ..	1,72,209	V. Rent of leased forests and payments to shareholders in forests managed by Government	27,145	(*a*) Conservators ..	12,251
(*d*) Grazing and fodder grass ..	2,11,528	VI. Live-stock, stores, tools and plant—		(*b*) Superior officers..	50,136
(*e*) Other minor produce ..	5,22,593	(*a*) Purchase of cattle ..	1,443	(*c*) Subordinate forest and depôt establishments ..	59,520
III. Confiscated drift and waifwood	12,406	(*b*) Feed and keep of cattle	20,552	(*d*) Office establishments	16,909
IV. Revenue from forests not managed by Government	..	(*c*) Stores, tools and plant	9,016	III. Contingencies—	
V. Miscellaneous—		VII. Communications and buildings—		(*a*) Stationery ..	2
(*a*) Fines and forfeitures	1,796	(*a*) Roads and bridges..	37,286	(*b*) Carriage of tents and records ..	7,225
(*b*) Refunds ..	8,869	(*b*) Buildings	59,395	(*c*) Rents, rates and taxes	3,510
(*c*) Other sources ..	60,642	(*c*) Other works ..	3,625	(*d*) Pay of Police guards	..
		VIII. Demarcation, improvement and extension of forests—		(*e*) Official postage ..	16,804
		(*a*) Demarcation ..	73,804	(*f*) Sundries	26,195
		(*b*) Compensation for lands and rights..	23,383		
		(*c*) Surveys and working plans ..	53,068		
		(*d*) Plantations ..	64,797		
		(*e*) Protection from fire.	67,020		
		(*f*) Other works ..	56,911		
		IX. Miscellaneous—			
		(*a*) Refunds	8,916		
		(*b*) Law charges ..	10,204	Total, B. Establishments	8,11,399
		(*c*) Other charges ..	4,870		
Total, Receipts ..	19,65,818	Total, A. Conservancy and Works	8,27,529	Grand Total of Expenditure	16,38,928

ANNUAL FORM No. 65.

Forest Department, Madras Presidency, Northern Circle.

OUTSTANDINGS and Liabilities on account of contractors and disbursers for 15 months ending 30th June 1893.

District.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Conservator, Northern Circle	..	4,376 1 0	4,376 1 0	26 8 9	4,510 11 3	4,536 4 0	160 3 0	..
Forest Settlement-officer, Kurnool	..	..	..	..	..	..	..	..
One-third of Examiner's office	..	414 10 8	414 10 8	244 8 11	170 1 9	414 10 8	..	..
Forest School, Dehra Dún	..	450 7 0	450 7 0	420 0 0	30 7 0	450 7 0	..	..
Gánjam	..	28,477 9 7	28,477 9 7	2,184 14 7	29,513 0 9	31,697 15 4	3,220 5 9	..
Vizagapatam	..	8,970 14 5	8,970 14 5	188 5 1	9,319 8 5	9,507 13 6	536 15 1	..
Gódávari	..	45,670 6 10	45,670 6 10	2,153 5 8	45,746 6 7	47,899 12 3	2,229 5 5	..
Kistna	..	37,615 10 5	37,615 10 5	179 8 8	38,571 8 11	38,751 1 7	1,135 7 2	..
Kurnool	..	51,546 2 11	51,546 2 11	927 1 1	52,170 10 2	53,097 11 3	1,551 8 4	..
Bellary	..	22,905 11 1	22,905 11 1	393 13 4	22,740 0 11	23,133 14 3	228 3 2	..
Anantapur	..	18,385 9 1	18,385 9 1	218 4 6	18,318 2 3	18,536 6 9	150 13 8	..
Total ..	..	2,18,813 3 0	2,18,813 3 0	6,935 6 7	2,21,090 10 0	2,28,026 0 7	9,212 13 7	..

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 65.

Forest Department, Madras Presidency, Central Circle.

Outstandings and Liabilities on account of contractors and disbursers for 15 months ending 30th June 1893.

District.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Conservator, Central Circle	..	1,753 9 7	1,753 9 7	30 0 1	1,792 9 8	1,822 9 9	69 0 2	..
Forest Settlement-officer, Salem, &c.	..	325 12 11	325 12 11	..	325 12 11	325 12 11	..	..
Do. Trichinopoly	..	8 14 0	8 14 0	..	8 14 0	8 14 0	..	..
Do. Nellore, &c.	..	660 15 6	660 15 6	39 6 0	639 7 0	678 13 0	17 13 6	..
One-third of Examiner's office	..	414 10 5	414 10 5	244 8 10	170 1 7	414 10 5	..	..
Forest School, Dehra Dun	..	644 14 0	644 14 0	..	644 14 0	644 14 0	..	..
Nellore	..	60,817 15 10	60,817 15 10	859 6 7	63,228 3 11	64,087 10 6	3,269 10 8	..
Cuddapah	..	51,720 0 8	51,720 0 8	632 2 8	51,874 9 10	52,506 12 6	786 11 10	..
Chingleput	..	18,415 8 0	18,415 8 0	62 4 7	18,723 12 0	18,786 0 7	370 8 7	..
North Arcot	..	1,16,375 5 6	1,16,375 5 6	2,761 8 2	1,15,753 13 6	1,18,515 5 8	2,140 0 2	..
South Arcot	..	50,514 13 8	50,514 13 8	1,782 0 0	50,656 9 3	52,438 9 3	1,923 11 7	..
Salem	..	76,814 2 6	76,814 2 6	1,132 4 0	77,792 0 3	78,924 4 3	2,110 1 9	..
Trichinopoly	..	37,672 0 9	37,672 0 9	105 14 5	38,221 5 0	38,327 3 5	655 2 8	..
Tanjore	..	9,482 2 11	9,482 2 11	181 5 3	9,447 0 2	9,628 5 5	146 2 6	..
Total ..	..	4,25,620 14 3	4,25,620 14 3	7,830 12 7	4,29,279 1 1	4,37,109 13 8	11,488 15 5	..

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 65.

Forest Department, Madras Presidency, Southern Circle.

Outstandings and Liabilities on account of contractors and disbursers for 15 months ending 30th June 1893.

District.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Conservator, Southern Circle	..	10,503 1 9	10,503 1 9	153 3 11	10,401 7 2	10,554 11 1	51 9 4	..
One-third of Examiner's office	..	414 10 7	414 10 7	244 8 9	170 1 10	414 10 7	..	..
Forest School, Dehra Dun	..	..	..	37 0 0	..	37 0 0	37 0 0	..
Nilgiris	..	40,447 15 8	40,447 15 8	238 4 6	41,586 5 10	41,824 10 4	1,376 10 8	..
Coimbatore, North	..	26,404 13 10	26,404 13 10	182 4 11	27,513 8 3	27,695 13 2	1,290 15 4	..
Coimbatore, South	..	43,983 2 10	43,983 2 10	1,276 11 2	44,409 9 3	45,686 4 5	1,703 1 7	..
Madura	..	1,06,385 0 5	1,06,385 0 5	1,275 4 11	1,09,278 9 8	1,10,553 14 7	4,168 14 2	..
Tinnevelly	..	88,550 5 10	88,550 5 10	3,814 14 0	87,487 14 0	91,302 12 0	2,752 6 2	..
Malabar, North	..	11,978 10 1	11,978 10 1	627 15 3	12,841 14 3	13,469 13 6	1,491 3 5	..
Malabar, South	..	15,896 7 8	15,896 7 8	418 11 11	16,415 0 2	16,833 12 1	937 4 5	..
South Canara	..	51,604 8 2	51,604 8 2	15,562 7 2	37,407 15 6	52,970 6 8	1,365 14 6	..
Total ...	..	3,96,168 12 10	3,96,168 12 10	23,831 6 6	3,87,512 5 11	4,11,343 12 5	15,174 15 7	..

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

GRAND TOTAL for the Presidency.

	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	..	RS. A. P. 10,40,602 14 1	RS. A. P. 10,40,602 14 1	RS. A. P. 38,597 9 8	RS. A. P. 10,37,882 1 0	RS. A. P. 10,76,479 10 8	RS. A. P. 35,876 12 7	RS. A. P. ..

ANNUAL FORM No. 66.

Forest Department, Madras Presidency, Northern Circle.

Revenue received and Outstandings on account of revenue for 15 months ending 30th June 1893.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Direction	Timber and other produce ..	..	549 6 1	549 6 1	549 6 1	..	
Ganjám	Do. do. ..	387 1 0	45,677 2 7	46,064 3 7	45,713 4 7 (a) + 350 13 0	0 2 0	(a) Written off the accounts as per Board's Proceedings, dated 23rd September 1892, No. 1009.
Vizagapatam	Do. do. ..	..	19,812 7 9	19,812 7 9	19,812 7 9	..	
Gódávari	Do. do. ..	154 12 0	1,12,530 7 9	1,12,685 3 9	1,12,501 1 9 (b) + 155 4 0	28 14 0	(b) Written off the accounts as per Government Order, dated 11th October 1892, No. 4415, communicated in Board's Proceedings, dated 24th October 1892, No. 1150.
Kistna	Do. do. ..	1,280 10 6	1,09,730 7 9	1,11,011 2 3	1,10,782 5 5	228 12 10	
Kurnool	Do. do. ..	139 8 10	89,894 6 8	90,033 15 6	90,033 15 6	..	
Bellary	Do. do. ..	3,207 15 0	43,663 10 4	46,871 9 4	46,436 2 10	435 6 6	
Anantapur	Do. do. ..	18 0 0	28,240 5 11	28,258 5 11	28,240 5 11 (c) + 18 0 0	..	(c) Written off the accounts as per Board's Proceedings, dated 27th April 1892, No. 440.
	Total ..	5,187 15 4	4,50,098 6 10	4,55,286 6 2	4,54,069 1 10 + 524 1 0	693 3 4	

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

Annual Form No. 66.

Forest Department, Madras Presidency, Central Circle.

Revenue received and Outstandings on account of revenue for 15 months ending 30th June 1893.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Direction	Timber and other produce..	..	344 12 1	344 12 1	344 12 1	..	
Nellore	Do. do. ..	500 0 0	91,701 5 8	92,201 5 8	92,201 5 8	..	
Cuddapah	Do. do. ..	58 7 0	1,60,720 7 3	1,60,778 14 3	1,60,491 8 9 + (*a*) 52 11 11	234 9 7	(*a*) Written off the accounts as per Board's Proceedings, Forest No. 1148, Mis., dated 24th October 1892.
Chingleput	Do. do. ..	...	46,588 2 6	46,588 2 6	46,588 2 6	..	
North Arcot	Do. do. ..	648 2 5	1,89,595 0 6	1,90,243 2 11	1,88,133 7 10	2,109 11 1	
South Arcot	Do. do. ..	70 1 0	1,01,281 1 5	1,01,351 2 5	1,01,234 15 5	116 3 0	
Salem	Do. do. ..	1,738 5 3	1,68,683 3 1	1,70,421 8 4	1,68,115 9 10 + (*b*) 1,113 13 3	1,192 1 3	(*b*) Written off the accounts as per Government Order, dated 8th October 1892, No. 4377, communicated in Board's Proceedings, dated 17th October 1892, Forest No. 1106, Mis.
Trichinopoly	Do. do. ..	2,250 1 11	88,785 6 8	91,035 8 7	87,440 14 10 + (*c*) 485 0 0	3,104 9 9	(*c*) Writtten off the accounts as per Government Order, dated 12th October 1892, No. 4482, communicated in Board's Proceedings, Forest No. 1149, dated 24th October 1892.
					+ (*d*) 5 0 0	..	(*d*) Board's Proceedings, Forest No. 688, Mis, dated 9th June 1893.
Tanjore	Do. do. ..	12 8 0	19,035 8 7	19,048 0 7	19,048 0 7	..	
	Total ..	5,277 9 7	8,66,734 15 9	8,72,012 9 4	8,63,598 13 6 + 1,656 9 2	6,757 2 8	

Madras,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

ANNUAL FORM No. 66.

Forest Department, Madras Presidency, Southern Circle.

Revenue received and Outstandings on account of revenue for 15 months ending 30th June 1893.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Direction	Timber and other produce ..	..	244 1 5	244 1 5	244 1 5	..	
Nilgiris	Do. do. ..	44 0 3	66,191 5 10	66,235 6 1	65,340 1 10	895 4 3	
North Coimbatore ..	Do. do. ..	868 11 7	1,44,073 5 3	1,44,942 0 10	1,44,696 14 1	234 2 9	
South Coimbatore ..	Do. do. ..	401 1 4	1,04,851 0 1	1,05,252 1 5	1,04,876 2 1	375 15 4	
Madura	Do. do. ..	1,450 3 8	92,952 7 9	94,402 11 5	73,834 14 7	20,567 12 10	
Tinnevelly	Do. do. ..	1,822 3 8	95,768 8 0	97,590 11 8	96,461 15 4	1,128 12 4	
North Malabar	Do. do. ..	4,933 0 6	26,924 0 4	31,857 0 10	30,517 0 10	1,340 0 0	
South Malabar	Do. do. ..	..	55,440 11 9	55,440 11 9	55,440 11 9	..	
South Canara	Do. do. ..	1,260 13 11	78,701 2 0	79,961 15 11	76,738 3 11 + * 105 0 0	3,118 12 0	* Written off the accounts as per Government Order, dated 4th April 1892, communicated in Board's Proceedings, dated 12th April 1892, No. 398.
	Total ..	10,780 2 11	6,65,146 10 5	6,75,926 13 4	6,48,150 1 10 + 105 0 0	27,671 11 6	

MADRAS,
29th August 1893.

(Signed) R. MORRIS,
Deputy Accountant-General.

GRAND TOTAL for the Presidency.

Outstandings at commencement of year.	Value of sales and other revenues during the year.	Total.	Amount realized during year.	Balance due to the department at end of the year.	Remarks.
RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
21,245 11 10	19,81,980 1 0	20,03,225 12 10	19,68,103 11 4	35,122 1 6	..

ANNUAL FORM No. 68.

Forest Department, Madras Presidency.

TREES felled by Government Agency during 1892–93.

Selection fellings.

Districts	Teak.	Rose-wood.	Vengai.	Red-wood.	Sal.	Iron-wood.	Sandal-wood.	Eucalyptus and acacia.	Miscella-neous.	Total.
Northern Circle.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
Stock at beginning of the year	..	..	..	..	..	2	..	..	(a) 41	43
Ganjám	..	..	..	..	662	..	..	..	2	664
Vizagapatam	..	..	..	..	..	..	..	..	..	..
Gódávari	2,501	..	..	..	..	..	..	..	2,649	5,150
Kistna	..	..	..	..	..	..	..	..	5,974	5,974
Anantapur	4	..	..	..	..	..	..	..	106	110
Bellary	..	..	..	..	..	..	..	..	16,043	16,043
Kurnool	6	..	168	..	..	..	..	..	103	277
Total felled during the year.	2,511	..	168	..	662	..	..	..	24,877	28,218
Total ..	2,511	..	168	..	662	2	..	..	24,918	28,261
Converted into logs, &c. ..	2,511	..	168	..	662	..	..	..	24,912	28,253
Balance on hand at end of the year	..	..	..	..	..	2	..	..	6	8
Central Circle.										
Stock at beginning of the year	..	..	..	..	..	..	..	..	874	874
Nellore	..	..	..	..	..	..	..	..	..	..
Cuddapah	..	..	..	..	..	..	..	..	53	53
Chingleput	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	4,770	..	..	..	..	2,173	6,943
South do.	..	..	..	..	..	..	..	..	..	..
Tanjore	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..	..
Salem	..	..	..	..	..	..	487	..	765	1,252
Total felled during the year.	..	..	..	4,770	..	..	487	..	2,991	8,248
Total ..	..	..	..	4,770	..	..	487	..	3,865	9,122
Converted into logs, &c. ..	..	..	..	4,770	..	..	487	..	2,992	8,249
Balance on hand at end of the year	..	..	..	..	..	..	..	..	873	873
Southern Circle.										
Stock at beginning of the year	43	11	22	..	..	..	..	..	215	291
Madura	..	2	187	..	..	..	..	..	167	356
Tinnevelly	..	..	..	..	..	..	..	..	154	154
North Coimbatore	..	..	..	..	..	..	..	..	..	..
South do.	292	6	..	..	..	..	..	..	413	711
Nilgiris	331	..	248	..	..	..	..	16,773	88	17,440
North Malabar	501	84	53	..	..	..	..	..	60	698
South do.	170	135	4	..	..	..	..	..	1,403	1,712
South Canara	65	4	26	..	..	..	..	..	370	465
Total felled during the year.	1,359	231	518	..	..	..	..	16,773	2,655	21,536
Total ..	1,402	242	540	..	..	..	..	16,773	2,870	21,827
Converted into logs, &c. ..	1,380	224	530	..	..	..	..	16,773	2,790	21,697
Balance on hand at end of the year	22	18	10	..	..	..	..	..	80	130
Grand Total.										
Total stock at beginning of the year	43	(a) 11	22	..	..	2	..	..	(a) 1,130	1,208
Total felled during the year.	3,870	231	686	4,770	662	..	487	16,773	30,523	58,002
Total ..	3,913	242	708	4,770	662	2	487	16,773	31,653	59,210
Total converted into logs, &c.	3,891	224	698	4,770	662	..	487	16,773	30,694	58,199
Total balance on hand at end of the year	22	18	10	..	..	2	..	..	959	1,011

(a) Two were shown by mistake under rosewood last year and are now included under miscellaneous.

ANNUAL FORM No. 69.

Forest Department, Madras Presidency.

STATEMENT of Timber and other produce cut and collected by Government Agency during the year 1892–93 (from 1st April 1892 to 30th June 1893).

—	TIMBER.								Fuel.	Bamboos.	Sandalwood.	Minor produce.
	Teak.	Rosewood.	Vengai.	Redwood.	Sál.	Iron wood.	Miscellaneous.	Total.				
Northern Circle.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Stock of the circle at the beginning of the year ..	14,247	..	..	..	21,498	586	1,962	38,293	337,007	14,053	..	62,525
Ganjám	..	..	..	..	4,682	..	128	4,810	..	760	..	1
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..
Gódávari	14,674	..	..	..	..	5	6,525	21,204	46,116	..	..	1,966
Kistna	..	..	..	..	..	..	7,757	7,757	40,395	6	..	41
Anantapur	5	..	..	..	..	..	525	530	..	275	..	204
Bellary	..	..	..	..	..	..	677	677	16,984	..	..	1,712
Kurnool	76	..	1,953	..	..	..	1,642	3,671	23,156	4,410	..	3,067
Collection during the year ..	14,755	..	1,953	..	4,682	5	17,254	38,649	126,651	5,451	..	6,991
Total ..	29,002	..	1,953	..	26,180	591	19,216	76,942	463,658	19,504	..	69,516
Sold locally in the forest ..	22,081	..	1,638	..	..	..	13,221	36,940	117,867	4,620	..	41,137
Used departmentally, wastage written off, &c.	77	..	..	..	2,565	..	1,544	4,186	258,395	13,840	..	6,063
Removed to sale depôts ..	6,750	..	..	..	17,754	..	213	24,717	34,041	760	..	632
Total disposal ..	28,908	..	1,638	..	20,319	..	14,978	65,843	410,303	19,220	..	47,832
Stock in the forest on 30th June 1893	94	..	315	..	5,861	591	4,238	11,099	53,355	284	..	21,684
Central Circle.												
Stock of the circle at the beginning of the year ..	..	..	..	..	..	..	(*a*)7,941	7,941	(*b*)119,737	..	..	50,153
Nellore	..	..	..	..	..	..	9	9	271,247	240	..	9,413
Cuddapah	..	..	..	128	..	..	5,382	5,510	34,450	8,334	..	10,193
Chingleput	..	..	..	..	..	..	705	705	34	..	..	3
North Arcot	..	..	..	4,000	..	..	10,574	14,574	341,646	5,204	464	63
South Arcot	..	..	..	..	..	..	743	743	52,025	1,700	..	30
Tanjore	..	..	..	..	..	..	..	..	1,360	..	..	..
Trichinopoly	..	..	..	..	..	..	202	202	214,283	..	..	3
Salem	..	..	..	..	..	..	1,761	1,761	32,996	3,220	531	450
Collection during the year ..	..	..	..	4,128	..	..	19,376	23,504	948,041	18,698	995	20,155
Total ..	..	..	..	4,128	..	..	27,317	31,445	1,067,778	18,698	995	70,308
Sold locally in the forest ..	..	..	..	1,703	..	..	18,204	19,907	602,561	14,728	..	5,611
Used departmentally, wastage written off, &c.	..	..	..	569	..	..	460	1,029	5,811	..	20	35,234
Removed to sale depôts ..	..	..	..	1,856	..	..	6,955	8,811	324,130	3,970	975	12,739
Total disposal ..	..	..	..	4,128	..	..	25,619	29,747	932,502	18,698	995	53,584
Stock in the forest on 30th June 1893	..	..	..	..	..	..	1,698	1,698	135,276	..	..	16,724
Southern Circle.												
Stock of the circle at the beginning of the year ..	(*c*) 36,157	3,639	13,077	..	..	..	(*c*)56,771	109,644	356,450	8,176	51	4,667
Madura	..	41	3,727	..	..	..	1,698	5,466	43,146	..	..	..
Tinnevelly	..	..	..	..	..	..	13,099	13,099	315,804	700	..	438
North Coimbatore	..	27	9	..	..	..	243	279	274	405	1,569	..
South Coimbatore	25,305	337	86	..	..	..	29,794	55,522	34,380	..	..	3,672
Nilgiris	11,346	1,048	7,927	..	..	..	579	20,900	411,294	..	990	482
North Malabar	20,055	2,177	1,786	..	..	..	1,621	25,639	..	..	..	..
South Malabar	19,807	4,302	284	..	..	..	53,023	77,416	821	6,593	..	310
South Canara	1,624	676	1,521	..	..	..	18,254	22,075	151,203	2,192	..	6,354
Collection during the year ..	78,137	8,608	15,340	..	..	..	118,311	220,396	956,922	9,890	2,559	11,256
Total ..	114,294	12,247	28,417	..	..	..	175,082	330,040	1,313,372	18,066	2,610	15,923

(*a*) Excludes 340 cubic feet classified wrongly under miscellaneous during 1891–92.
(*b*) Includes do. do. do.
(*c*) 22 cubic feet classed under teak during 1891–92 has been classed under miscellaneous this year.

Statement of Timber and other produce cut and collected by Government Agency, &c.—*cont.*

	Timber.											
	Teak.	Rosewood.	Vengai.	Redwood.	Sal.	Iron wood.	Miscellaneous.	Total.	Fuel.	Bamboos.	Sandalwood.	Minor produce.
Southern Circle—cont.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Sold locally in the forest ..	44,363	2,986	22,789	..	..	..	56,744	126,882	698,810	5,739	1,034	14,266
Used departmentally, wastage written off, &c. ..	2,362	45	889	..	..	..	10,374	13,670	79,208	335	8	313
Removed to sale depôts ..	34,977	500	879	..	..	..	38,004	74,360	227,572	6,332	1,555	3
Total disposal ..	81,702	3,531	24,557	..	..	..	105,122	214,912	1,005,590	12,406	2,597	14,582
Stock in the forest on 30th June 1893	32,592	8,716	3,860	..	..	..	69,960	115,128	307,782	5,660	13	1,341
							Grand Total.					
Stock of the circles at the beginning of the year ..	(c) 50,404	3,639	13,077	..	21,498	586	(a) (c) 66,674	155,878	(b)813,194	22,229	51	117,345
Collection during the year..	92,892	8,608	17,293	4,128	4,682	5	154,941	282,549	2,031,614	34,039	3,554	38,402
Total ..	143,296	12,247	30,370	4,128	26,180	591	221,615	438,427	2,844,808	56,268	3,605	155,747
Sold locally in the forest ..	66,444	2,986	24,427	1,703	..	..	88,169	183,729	1,419,238	25,087	1,034	61,014
Used departmentally, wastage written off, &c. ..	2,439	45	889	569	2,565	..	12,378	18,885	343,414	14,175	28	41,610
Removed to sale depôts ..	41,727	500	879	1,856	17,754	..	45,172	107,888	585,743	11,062	2,530	13,374
Total disposal ..	110,610	3,531	26,195	4,128	20,319	..	145,719	310,502	2,348,395	50,324	3,592	115,998
Stock in the forest on 30th June 1893	32,686	8,716	4,175	..	5,861	591	75,896	127,925	496,413	5,944	13	39,749

(*a*) Excludes 340 cubic feet classified wrongly under miscellaneous during 1891–92.
(*b*) Includes do. do. do.
(*c*) 22 cubic feet classed under teak during 1891–92 has been classed under miscellaneous this year.

ANNUAL FORM No. 70.

Forest Department, Madras Presidency.

RECEIPTS and Issues of Timber and other produce in sale depôts during the year 1892–93 (from 1st April 1892 to 30th June 1893).

	TIMBER.											
	Teak.	Rosewood.	Vengai.	Redwood.	Sál.	Ironwood.	Miscellaneous.	Total.	Fuel.	Bamboos.	Sandalwood.	Minor produce.
Northern Circle.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Stock of the circle at sale depôts at the beginning of the year	..	..	..	..	1,562	40	1,146	2,748	10,558	8,535	..	..
Ganjám	..	..	..	..	17,754	..	128	17,882	..	760	..	1
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..
Gódávari	6,750	..	..	..	..	..	85	6,835	..	..	..	446
Kistna	..	..	..	..	..	..	..	..	31,421	..	..	..
Anantapur	..	..	..	..	..	..	..	..	..	..	..	185
Bellary	..	..	..	..	..	..	..	..	2,620	..	..	..
Kurnool	..	..	..	..	..	..	..	..	..	..	..	..
Total received from forests into the sale depôts during the year	6,750	..	..	..	17,754	..	213	24,717	34,041	760	..	632
Receipts from one sale depôt into another	..	..	..	..	550	..	..	550	..	760	..	..
Quantity found in depôts in excess of original measurement in the forests	..	..	..	..	45	12	20	77	10	..	..	..
Total receipts, including previous year's stock	6,750	..	..	..	19,911	52	1,379	28,092	44,609	10,055	..	632
Sold from depôts	6,600	..	..	..	13,906	..	1,051	21,557	39,139	760	..	532
Removed from one sale depôt into another	..	..	..	..	550	..	..	550	..	760	..	..
Deduct excess by wrong measurement	..	..	..	..	963	..	172	1,135	1,401	..	..	..
Quantity used departmentally, wastage written off, &c.	132	..	..	..	77	..	14	223	4,069	8,535	..	44
Total	6,732	..	..	..	15,496	..	1,237	23,465	44,609	10,055	..	576
Balance at the end of the year	18	..	..	..	4,415	52	142	4,627	..	..	..	56
Central Circle.												
Stock of the circle at sale depôts at the beginning of the year	..	..	..	77,526	..	..	812	78,338	23,942	..	91	40,560
Nellore	..	..	..	..	..	..	..	..	211,618	..	..	4,204
Cuddapah	..	..	..	128	..	..	4,706	4,834	..	..	..	8,535
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..
North Arcot	..	..	..	1,728	..	..	286	2,014	71,779	750	444	..
South Arcot	..	..	..	..	..	..	..	..	..	..	..	..
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	202	202	40,733	..	..	..
Salem	..	..	..	..	..	..	1,761	1,761	..	3,220	531	..
Total received from forests into the sale depôts during the year	..	..	..	1,856	..	..	6,955	8,811	324,130	3,970	975	12,739
Quantity found in depôts in excess of original measurement in the forests	..	..	..	3,800	..	..	..	3,800	6,475	..	2	28
Total receipts, including previous year's stock	..	..	..	83,182	..	..	7,767	90,949	354,547	3,970	1,068	53,327
Sold from depôts	..	..	..	82,097	..	..	7,012	89,109	323,963	3,220	446	47,734
Quantity used departmentally, wastage, written off, &c.	..	..	..	127	..	..	288	415	2,235	..	18	1,129
Total	..	..	..	82,224	..	..	7,300	89,524	326,198	3,220	464	48,863
Balance at the end of the year	..	..	..	958	..	..	467	1,425	28,349	750	604	4,464

Receipts and Issues of Timber and other produce in sale depôts during the year 1892–93—*cont.*

	Timber.											
	Teak.	Rosewood.	Vengai.	Redwood.	Sál.	Ironwood.	Miscellaneous.	Total.	Fuel.	Bamboos.	Sandalwood.	Minor produce.
Southern Circle.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.
Stock of the circle at sale depôts at the beginning of the year	18,116	..	230	..	..	..	8,990	27,336	47,462	750	1,686	16
Madura	..	..	..	..	..	..	..	..	21,299	..	..	..
Tinnevelly	..	..	..	..	..	..	1,746	1,746	1,267	..	..	3
North Coimbatore ..	..	27	9	..	..	..	39	75	1	90	1,555	..
South do. ..	26,103	203	465	..	..	..	27,752	54,523	..	..	..	..
Nilgiris	..	..	..	..	..	..	146	146	204,184	..	..	..
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..
South do.	7,451	..	..	..	..	..	..	7,451	821	6,242	..	..
South Canara	1,423	270	405	..	..	..	8,321	10,419	..	..	..	..
Total received from forests into the sale depôts during the year	34,977	500	879	..	..	.	38,004	74,360	227,572	6,332	1,555	3
Quantity found in depôts in excess of original measurements in forest.	2,313	..	1	..	..	..	4	2,318	..	..	..	..
Total receipts including previous year's stock ..	55,406	500	1,110	..	..	..	46,998	104,014	275,034	7,082	3,241	19
Sold from depôts	23,647	473	1,043	..	..	..	42,676	73,839	218,762	6,242	2,614	15
Excess by wrong measurement	1	2	..	..	..	..	3	6	..	..	..	..
Quantity used departmentally, wastage written off, &c.	4,614	..	..	..	..	..	1,119	5,733	18,172	840	..	4
Total ..	34,262	475	1,043	..	..	..	43,798	79,578	236,934	7,082	2,614	19
Balance on 30th June 1893	21,144	25	67	..	..	..	3,200	24,436	38,100	..	627	..
					Grand Total.							
Stock of the circles at sale depôts at the beginning of the year	18,116	..	230	77,526	1,562	40	10,948	108,422	81,962	9,285	1,777	40,576
Total received from forest into sale depôts during the year	41,727	500	879	1,856	17,754	..	45,172	107,888	585,743	11,062	2,530	13,374
Receipts from one sale depôt into another ..	..	..	..	..	550	..	..	550	..	760	..	..
Quantity found in excess of original measurements in forests ..	2,313	..	1	3,800	45	12	24	6,195	6,486	..	2	28
Total receipts including previous year's stock ..	62,156	500	1,110	83,182	19,911	52	56,144	223,055	674,190	21,107	4,309	53,978
Sold from depôts	36,247	473	1,043	82,097	13,906	..	50,739	184,505	581,864	10,222	3,060	48,281
Removed from one sale depôt into another ..	..	..	..	..	550	..	..	550	..	760	..	..
Deduct excess by wrong measurement	1	2	..	..	963	..	175	1,141	1,401	..	..	..
Quantity used departmentally, wastage written off, &c.	4,746	..	..	127	77	..	1,421	6,371	24,476	9,375	18	1,177
Total ..	40,994	475	1,043	82,224	15,496	..	52,335	192,567	607,741	20,357	3,078	49,458
Stock on 30th June 1893.	21,162	25	67	958	4,415	52	3,809	30,488	66,449	750	1,231	4,520

ANNUAL FORM No. 71.

Forest Department, Madras Presidency.

SALES of timber and other produce cut and collected by Government Agency during the year 1892–93 (from 1st April 1892 to 30th June 1893).

District.	TIMBER.														TOTAL TIMBER.			
	Teak.		Rosewood.		Vengai.		Redwood.		Sâl.		Ironwood.		Miscellaneous.		From depôt.		From forest.	
	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	From depôt.	From forest.	Quantity.	Amount.	Quantity.	Amount.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	RS.	C. FT.	RS.
Direction	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ganjám	..	..	..	..	..	..	..	..	13,906	..	..	..	946	..	14,852	4,250	..	..
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
Gódávari	..	..	..	..	..	..	..	..	..	..	..	..	105	4,093	6,705	3,578	26,104	11,320
Kistna	..	..	..	..	..	..	..	..	..	..	..	..	..	7,732	..	..	7,732	431
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	..	350	..	..	350	44
Bellary	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	3	3
Kurnool	..	..	..	..	..	..	..	..	..	..	..	..	..	1,043	..	..	2,751	2,873
Total	..	6,600	22,081	..	..	..	1,638	..	..	13,906	..	..	..	1,051	13,221	21,557	7,828	36,940	14,695
Central Circle.																		
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..	..	9	2
Cuddapah	..	..	..	..	..	..	81,327	..	..	..	..	..	4,846	2,496	86,173	16,835	2,496	102
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..	705	..	..	705	57
North Arcot	..	..	..	..	..	..	770	1,703	..	..	..	..	66	14,330	836	850	16,033	7,863
South do.	..	..	..	..	..	..	..	..	..	..	..	..	339	664	339	11	664	163
Tanjore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem	..	..	..	..	..	..	..	..	..	..	..	..	1,761	..	1,761	1,311	..	..
Total	..	..	..	..	..	..	82,097	1,703	..	..	..	..	7,012	18,204	89,109	19,007	19,907	8,187
Southern Circle.																		
Madura	..	..	214	..	790	..	3,224	..	..	..	..	..	..	1,390	..	..	5,618	6,322
Tinnevelly	..	..	..	..	..	..	..	..	..	..	..	..	606	6,680	606	243	6,680	5,672
North Coimbatore	..	..	..	27	..	9	..	..	..	..	..	..	70	204	106	5	204	10
South do.	..	19,340	851	201	..	572	32	..	..	..	..	..	31,695	10,857	51,808	34,620	11,740	5,790
Nilgiris	..	..	19,192	..	249	..	11,549	..	..	..	..	..	246	213	246	259	31,203	13,117
North Malabar	..	..	17,079	..	1,077	..	6,193	..	..	..	..	..	..	1,312	..	..	25,661	14,655
South do.	..	8,970	6,749	..	335	..	622	..	..	..	..	..	..	30,703	8,970	14,518	38,409	24,679
South Canara	..	1,337	278	245	535	462	1,169	..	..	..	..	..	10,059	5,385	12,103	9,568	7,367	417
Total	..	29,647	44,363	473	2,986	1,043	22,789	..	..	..	..	..	42,676	56,744	73,839	59,213	1,26,882	70,662

* The Collector has not given the quantity sold.

Sales of timber and other produce cut and collected by Government Agency during the year 1892–93, &c.—*cont.*

District.	Fuel.				Bamboos.				Sandalwood.				Minor produce.			
	From depôt.		From forest.		From depôt.		From forest.		From depôt.		From forest.		From depôt.		From forest.	
	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Northern Circle.	C. FT.	RS.	C. FT.	RS.	NO.	RS.	NO.	RS.	C. FT.	RS.	C. FT.	RS.	MDS.	RS.	MDS.	RS.
Direction	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	178
Ganjám	346	21	..	..	760	5	..	..	..	..	..	..	1	1	..	..
Vizagapatam	..	..	* ..	4	..	..	..	..	..	..	..	..	..	..	..	..
Gódávari	..	..	6,693	534	..	..	..	..	..	..	..	..	402	276	..	..
Kistna	36,173	2,108	77,918	3,691	..	..	..	..	..	..	..	..	..	..	40	9
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	129	130	..	..
Bellary	2,620	592	10,100	387	..	..	..	..	..	..	..	..	..	..	688	100
Kurnool	..	..	23,156	457	..	..	4,620	258	..	..	..	..	..	..	40,409	934
Total	39,139	2,721	117,867	5,073	760	5	4,620	258	..	..	..	..	532	407	41,137	1,221
Central Circle.																
Nellore	211,415	32,355	86,012	6,868	..	..	240	112	..	..	..	..	4,232	4,287	2,957	1,260
Cuddapah	..	..	860	379	..	..	8,334	123	..	..	..	..	43,502	1,596	1,850	928
Chingleput	..	..	34	134	..	..	..	..	..	..	..	..	..	..	3	9
North Arcot	72,159	10,903	269,867	14,453	..	..	4,454	2,430	444	4,980	..	..	..	..	231	45
South do.	..	..	41,157	4,086	..	..	1,700	349	..	..	..	..	..	..	30	3
Tanjore	..	..	1,360	94	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	40,389	3,355	170,275	11,188	..	..	..	..	..	..	..	..	..	..	3	16
Salem	..	..	32,996	3,318	3,220	180	..	..	2	6	..	..	..	..	537	14
Total	323,963	46,613	602,561	40,520	3,220	180	14,728	3,014	446	4,986	..	..	47,734	5,883	5,611	2,275
Southern Circle.																
Madura	14,852	1,771	23,107	726	..	..	2,091	57	..	..	..	..	..	..	..	..
Tinnevelly	1,200	97	315,342	7,249	..	..	700	7	..	..	..	..	8	112	435	142
North Coimbatore	..	..	..	..	..	..	..	..	2,614	24,714	..	..	..	..	..	..
South do.	3,249	653	35,266	843	..	..	..	..	..	..	..	..	..	..	3,301	7,801
Nilgiris	198,658	16,963	170,839	6,840	..	..	..	..	..	..	1,034	10,400	..	..	320	710
North Malabar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	84
South do.	803	38	..	..	6,242	574	656	43	..	..	..	..	7	1	286	871
South Canara	..	..	154,256	5,888	..	..	2,292	6	..	..	..	..	..	..	9,923	29,444
Total	218,762	19,522	698,810	21,546	6,242	574	5,739	113	2,614	24,714	1,034	10,400	15	113	14,266	39,052

* The Collector has not given the quantity sold.

Sales of timber and other produce cut and collected by Government Agency, &c.—*cont.*

	Quantity sold.			Amount of sales.			Amount actually realized.
	From depôt.	From forest.	Total.	From depôt.	From forest.	Total.	
			Abstract.				
				Rs.	Rs.	Rs.	Rs.
Northern Circle.							
I (*a*) Timber .. .. C.ft.	21,557	36,940	58,497	7,828	14,695	22,493	22,559
(*b*) Fuel .. .. .. ,,	39,139	117,867	157,006	2,721	5,073	7,794	7,794
(*c*) Bamboos .. .. No.	760	4,620	5,380	5	258	263	328
(*d*) Sandalwood .. .. C.ft.	..	..	..	..	..	..	..
(*e*) Minor produce .. Mds.	532	41,137	41,669	407	1,221	1,458	1,628
Central Circle.							
I (*a*) Timber .. .. C.ft.	89,109	19,907	109,016	19,007	8,187	27,194	26,968
(*b*) Fuel .. .. .. ,,	323,963	602,561	926,524	46,613	40,520	87,133	86,020
(*c*) Bamboos .. .. No.	3,220	14,728	17,948	180	3,014	3,194	3,194
(*d*) Sandalwood .. .. C.ft.	446	..	446	4,986	..	4,986	4,981
(*e*) Minor produce .. Mds.	47,734	5,611	53,345	5,883	2,275	8,158	8,163
Southern Circle.							
I (*a*) Timber .. .. C.ft.	73,839	126,882	200,721	59,213	70,662	1,29,875	1,34,134
(*b*) Fuel .. .. .. ,,	218,762	698,810	917,572	19,522	21,546	41,068	39,909
(*c*) Bamboos .. .. No.	6,242	5,739	11,981	574	113	687	679
(*d*) Sandalwood .. .. C.ft.	2,614	1,034	3,648	24,714	10,400	35,114	35,114
(*e*) Minor produce .. Mds.	15	14,266	14,281	113	39,052	39,165	39,337
			Grand Total.				
I (*a*) Timber .. .. C.ft.	184,505	183,729	368,234	86,048	93,544	1,79,592	1,83,661
(*b*) Fuel .. .. .. ,,	581,864	1,419,238	2,001,102	68,856	67,139	1,35,995	1,33,723
(*c*) Bamboos .. .. No.	10,222	25,087	35,309	759	3,385	4,144	4,201
(*d*) Sandalwood .. .. C.ft.	3,060	1,034	4,094	29,700	10,400	40,100	40,095
(*e*) Minor produce .. Mds.	48,281	61,014	109,295	6,403	42,548	48,951	49,128

Grand total of sales during the year both from forests and depôts	4,08,782	4,10,808
Add outstandings due from previous year as per Form No. 66 ..	7,456	..
Total ..	4,16,238	..
Deduct amount of outstandings written off	525	..
Do. realized as per Form No. 64	4,10,808	..
Balance outstanding on 30th June 1893 ..	4,905	..

Annual Form No. 72-A.

Forest Department, Madras Presidency.

Timber and other produce cut, collected and removed by consumers or purchasers during 1892–93 (from 1st April 1892 to 30th June 1893).

District.	Timber.	Firewood and charcoal.	Bamboos.	Money value of sales.											
				Timber.		Firewood and charcoal.		Bamboos.		Grazing and fodder grass.		Minor produce.		Total.	
				Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.	Amount of sales.	Amount actually realized during the year.
Northern Circle.	C. FEET.	C. FEET.	NO.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjám	167,815	570,349	2,311,740	17,999	17,999	7,753	7,753	8,186	8,186	2,642	2,642	3,739	3,739	40,319	40,319
Vizagapatam	79,087	311,261	541,932	2,519	2,519	6,988	6,988	5,895	5,895	75	75	3,382	3,382	18,859	18,859
Gódávari	307,352	477,069	6,596,569	29,471	29,471	10,662	10,662	35,589	35,560	4,356	4,356	9,029	9,029	89,107	89,078
Kistna	327,929	877,948	104,445	21,897	21,875	13,849	13,849	503	503	45,249	45,425	18,394	19,293	99,892	1,00,945
Anantapur	39,330	112,880	12,794	6,458	6,458	2,711	2,711	204	204	1,559	1,559	15,319	15,319	26,251	26,251
Bellary	104,311	190,398	82,806	7,980	7,980	4,645	4,645	1,656	1,656	3,943	3,943	23,231	26,004	41,455	44,228
Kurnool	338,688	319,320	2,207,975	37,204	37,204	9,036	9,036	16,605	16,605	10,846	10,846	9,444	9,519	83,135	83,210
Total ..	1,364,512	2,859,225	11,858,261	1,23,528	1,23,506	55,644	55,644	68,638	68,609	68,670	68,846	82,538	86,285	3,99,018	4,02,890
Central Circle.															
Nellore	167,522	97,893	1,488	12,164	12,164	2,562	2,562	111	111	15,055	15,055	14,904	14,904	44,796	44,796
Cuddapah	110,813	576,041	725,750	18,175	18,175	19,857	19,857	7,267	7,267	10,954	10,954	79,546	79,546	1,35,799	1,35,799
Chingleput	33,044	168,726	2,818	4,321	4,321	10,393	10,393	259	259	5,403	5,403	24,878	24,878	45,254	45,254
North Arcot	59,447	223,538	426,322	10,335	10,335	33,774	33,772	29,341	29,341	11,669	11,669	53,986	53,986	1,39,105	1,39,103
South do.	62,273	524,945	340,000	7,994	8,042	28,952	28,952	3,407	3,407	8,623	8,623	42,744	42,744	91,720	91,768
Tanjore	20,117	403,262	86,016	1,265	1,265	8,574	8,574	394	394	687	687	6,158	6,158	17,078	17,078
Trichinopoly	217,152	1,019,047	753,505	15,550	15,550	14,677	14,569	5,445	5,445	5,904	5,303	27,492	26,907	69,068	67,774
Salem	305,865	668,241	4,125,080	26,753	26,753	32,015	31,934	31,600	31,600	18,300	18,300	50,217	49,735	1,58,885	1,58,322
Total ..	976,233	3,681,693	6,460,979	96,557	96,605	1,50,804	1,50,613	77,824	77,824	76,595	75,994	2,99,925	2,98,858	7,01,705	6,99,894
Southern Circle.															
Madura	26,157	77,366	126,000	12,031	12,031	7,435	8,185	1,262	1,262	1,014	1,014	59,885	40,974	81,627	63,466
Tinnevelly	22,048	1,501,644	180,000	6,731	6,731	44,762	45,348	1,779	1,705	4,280	4,280	20,413	20,549	77,965	78,613
North Coimbatore ..	52,194	421,200	1,030,000	6,534	6,534	12,717	12,682	10,298	10,298	41,250	41,250	43,429	44,087	1,14,228	1,14,851
South do.	21,053	875,793	650,000	5,294	5,294	14,333	14,333	6,457	6,457	14,614	14,625	9,026	9,026	49,724	49,735
Nilgiris	16,826	46,654	23,363	3,927	3,927	1,412	1,412	2,496	2,496	4,936	4,936	3,232	3,232	16,003	16,003
North Malabar	17,564	1,536	40,041	4,644	4,644	16	16	591	591	455	455	3,748	2,498	9,454	8,204
South do.	84,759	277,190	153,084	3,987	3,987	4,922	4,922	1,631	1,631	128	128	353	353	11,021	11,021
South Canara	16,299	316,448	89,000	2,444	2,444	6,109	6,109	1,336	1,336	..	...	18,744	16,731	28,633	26,620
Total ..	250,900	3,517,831	2,291,488	45,592	45,592	91,706	93,007	25,850	25,776	66,677	66,688	1,58,830	1,37,450	3,88,655	3,68,513
Grand total ..	2,591,645	10,058,749	20,610,728	2,65,677	2,65,703	2,98,154	2,99,264	1,72,312	1,72,209	2,11,942	2,11,528	5,41,293	5,22,593	14,89,378	14,71,297

Add outstanding due from previous year as per Form No. 66	13,774
Total ..	15,03,152
Deduct amount of outstanding written off, &c.	1,760
Do. realized during the year as per Form No. 64	14,71,297
Balance outstanding on 30th June 1893 as per Form No. 66	30,095

ANNUAL FORM No. 72-B.

Forest Department, Madras Presidency.

TIMBER and other Produce confiscated and sold during the year 1892–93 (from 1st April 1892 to 30th June 1893).

District.	TIMBER.		FIREWOOD.		BAMBOOS.		Minor produce in value.	Total amount of sales.	Amount actually realized.
	Quantity in cubic feet.	Amount of sales.	Quantity in cubic feet.	Amount of sales.	Number.	Amount of sales.			
Northern Circle.		RS.		RS.		RS.	RS.	RS.	RS.
Ganjám	3,335	605	961	49	430	1	14	669	669
Vizagapatam ..	1,773	57	277	6	91	2	105	170	170
Gódávari	17,182	4,226	3,314	98	300	4	26	4,354	4,354
Kistna	1,841	135	604	32	4,820	32	74	273	273
Anantapur	50	9	3,097	323	..	..	53	385	385
Bellary	46	38	954	92	..	..	4	134	134
Kurnool	2,642	852	597	39	768	4	44	939	939
Total ..	26,869	5,922	9,804	639	5,909	43	320	6,924	6,924
Central Circle.									
Nellore	335	35	343	17	..	..	..	52	52
Cuddapah	1,175	562	128	12	80	3	276	853	854
Chingleput	206	120	122	11	100	1	..	132	132
North Arcot ..	662	169	4,913	244	1,260	8	18	439	439
South do. ..	3,002	195	14,560	227	100	1	77	500	500
Tanjore	..	..	52	6	..	..	..	6	6
Trichinopoly ..	337	351	1,278	41	455	10	30	432	432
Salem	2,229	1,403	992	84	24,360	29	22	1,538	1,538
Total ..	7,946	2,835	22,388	642	26,355	52	423	3,952	3,953
Southern Circle.									
Madura	2,683	227	1,030	29	..	..	3	259	259
Tinnevelly	28	21	4,734	171	..	..	19	211	211
North Coimbatore ..	204	66	273	10	3,570	39	5	120	120
South do. ..	756	90	818	66	3,500	39	46	241	241
Nilgiris	40	9	105	6	216	2	1	18	18
North Malabar ..	..	..	..	..	..	..	1	1	1
South do. ..	4	1	40	1	136	2	11	15	15
South Canara ..	4,275	575	982	35	2,192	21	33	664	664
Total ..	7,990	989	7,982	318	9,614	103	119	1,529	1,529
Grand Total ..	42,805	9,746	40,174	1,599	41,878	198	862	12,405	12,406

Add outstanding due from previous year as per Form No. 66		13
	Total ..	12,418
Deduct amount of outstanding recovered and apparently adjusted under V		* 12
Do. realized during the year as per Form No. 66		12,406
Balance outstanding on 30th June 1893 ..		..

* Rs. 12 outstanding in 1891–92 against Tanjore appears to have been recovered and adjusted against V.

ANNUAL FORM No. 73-A.

Forest Department, Madras Presidency

ABSTRACT showing the Value of Timber and other produce at sale depôts for the year 1892–93.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	Northern Circle.			Rs.			Rs.	Rs.	Rs.
Ganjám ..	Sal logs	224	1,462	548	209	4,320	1,620	1,072	..
	,, sleepers	54	100	108	27	94	54	..	54
	,, slabs	6,721	..	105	69	7	1	..	104
	Miscellaneous	64	1,026	144	1	16	2	..	142
	Total, Timber ..	..	2,588	905	..	4,437	1,677	772	..
	Firewood	..	5,806	181	..	..	..	..	181
	Bamboos	8,535	..	105	..	..	..	..	105
Vizagapatam ..	Ironwood	2	40	40	2	40	40	..	..
	Miscellaneous	6	120	120	6	120	120	..	..
	Total, Timber ..	..	160	160	..	160	160	..	..
Gódávari ..	Teak	..	..	..	..	18	27	27	..
	Ironwood	..	..	..	..	12	18	18	..
	Total, Timber ..	..	..	..	..	30	45	45	..
Kistna ..	Firewood	..	4,752	72	..	..	..	..	72
Anantapur ..	Minor produce	..	..	..	Mds. 56	..	139	139	..
	Central Circle.								
Nellore ..	Firewood	..	19,091	2,552	..	19,294	2,267	..	285
Cuddapah ..	Redwood roots and stumps.	..	77,526	15,327	..	..	..	..	15,327
	Miscellaneous	..	470	294	..	245	40	..	254
	Total, Timber ..	..	77,996	15,621	..	245	40	..	15,581
	Minor produce	Mds. 40,560	..	20,711	Mds. 4,464	..	585	..	20,126
North Arcot ..	Miscellaneous timber ..	..	..	..	..	220	31	31	..
	Redwood posts	..	..	..	..	958	240	240	..
	Total, Timber ..	..	..	..	..	1,178	271	271	..
	Firewood	..	1,715	128	..	6,095	1,373	1,245	..
	Bamboos	..	..	..	750	..	15	15	..
South Arcot ..	Sandalwood roots ..	..	91	361	..	73	359	..	2
	Miscellaneous timber ..	..	342	211	..	(a) 2	1	..	210
Trichinopoly ..	Firewood	..	3,136	260	..	2,960	182	..	78
Salem	Sandalwood	lbs. 19	..	1	..	531	6,271	6,270	..

(a) Vengai included under Miscellaneous in 1891–92 report.

Abstract showing the Value of Timber and other produce at sale depôts for the year 1892-93—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
				Rs.			Rs.	Rs.	Rs.
	Southern Circle.								
Madura ..	Firewood	..	2,456	241	..	10,435	1,169	928	..
	Charcoal	..	2,218	186	..	686	58	..	128
Tinnevelly ..	Miscellaneous	2	12	12	..	385	191	179	..
	Minor produce	Mds. lb. 7 23	..	114	..	..	..	..	114
North Coimbatore.	Sandalwood billet and roots	..	1,686	1,645	..	627	16,441	14,796	..
	Miscellaneous	..	330	85	..	..	..	..	85
	Bamboos	No. 750	..	10	..	..	..	..	10
South Coimbatore.	Teak	..	12,316	17,110	..	18,498	27,888	10,778	..
	Redwood	..	106	106	..	..	..	..	106
	Miscellaneous	..	4,275	2,561	..	303	150	..	2,411
	Total, Timber ..	..	16,697	19,777	..	18,801	28,038	8,261	..
	Firewood	..	20,743	1,779	..	..	..	..	1,779
	Minor produce	lb. 3	..	6	..	..	..	..	6
Nilgiris ..	Miscellaneous timber ..	..	374	466	..	251	219	..	247
	Firewood and charcoal ..	..	22,013	1,630	..	26,979	1,940	310	..
South Malabar.	Teak	..	5,419	1,500	..	2,179	3,268	1,768	..
	Fuel	..	32	2	..	..	..	..	2
	Minor produce ..	Mds. 7½	..	5	..	..	..	..	5
South Canara ..	Teak	..	381	621	..	467	759	138	..
	Rosewood	..	124	109	..	25	27	..	82
	Miscellaneous	..	3,999	3,278	..	2,261	2,168	..	1,110
	Vengai	..	..	..	..	67	60	60	..
	Total, Timber ..	..	4,504	4,008	..	2,820	3,014	..	994

ABSTRACT.

	Northern Circle.								
	Timber	..	2,748	1,065	..	4,627	1,882	817	..
	Firewood	..	10,558	253	..	..	..	..	253
	Bamboos	No. 8,535	..	105	..	..	..	..	105
	Minor produce	..	..	..	Mds. 56	..	139	139	..
	Central Circle.								
	Timber	..	78,338	15,832	..	1,425	312	..	15,520
	Sandalwood	..	91	362	..	604	6,630	6,268	..
	Firewood	..	23,942	2,940	..	28,349	3,822	882	..
	Bamboos	..	..	..	No. 750	..	15	15	..
	Minor produce	Mds. 40,560	..	20,711	Mds. 4,464	..	585	..	20,126

Abstract showing the Value of Timber and other produce at sale depôts for the year 1892–93—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	ABSTRACT—*cont.*								
	Southern Circle.			Rs.			Rs.	Rs.	Rs.
	Timber	..	27,836	25,848	..	24,436	34,730	8,882	..
	Sandalwood	..	1,686	1,645	..	627	16,441	14,796	..
	Firewood	..	47,462	3,838	..	38,100	3,167	..	671
	Bamboos	No. 750	..	10	..	..	..	..	10
	Minor produce	Mds. 16	..	125	..	..	..	..	125
	Grand Total.								
	Timber	..	108,422	42,745	..	30,488	36,924	..	5,821
	Sandalwood	..	1,777	2,007	..	1,231	23,071	21,064	..
	Firewood	..	81,962	7,031	..	66,449	6,989	..	42
	Bamboos	No. 9,285	..	115	No. 750	..	15	..	100
	Minor produce	Mds. 40,576	..	20,836	Mds. 4,520	..	724	..	20,112

Annual Form No. 73-B.

Forest Department, Madras Presidency.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1892–93 (from 1st April 1892 to 30th June 1893).

Districts	Surveying, &c., Instruments				Tools				Machinery				Furniture			
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Northern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Direction	24	402	24	402	..	..	..	..	..	..	..	..	109	1,790	109	1,790
Ganjám	39	643	47	852	185	264	189	280	..	..	..	..	55	410	58	422
Vizagapatam	13	23	18	343	24	11	75	65	..	..	..	..	36	317	40	* 286
Gódávari	62	537	56	* 534	594	1,084	602	1,109	..	..	..	..	62	412	85	658
Kistna	51	625	60	739	389	480	416	* 451	..	..	..	..	59	461	67	585
Anantapur	59	281	44	* 247	91	325	149	614	..	..	..	..	56	328	78	470
Bellary	33	138	37	* 137	227	396	267	437	..	..	..	..	38	271	38	* 232
Kurnool	54	269	55	507	572	772	572	* 719	..	..	..	..	53	449	58	456
Total	335	2,918	341	3,761	2,082	3,332	2,270	3,675	..	..	..	..	468	4,438	533	4,899
Central Circle.																
Direction	19	249	19	249	..	..	..	..	..	..	..	..	51	186	51	186
Nellore	60	395	61	404	357	1,032	473	1,211	miles 7¼	32,644	miles 7½ 15	34,802	73	414	76	423
Cuddapah	78	406	103	690	377	591	474	1,396	miles 3½	13,967	miles 3½	13,967	83	637	114	813
Chingleput	24	382	23	* 380	289	644	393	733	..	..	..	..	44	446	81	762
North Arcot	21	639	21	* 632	1,105	2,345	1,360 cwt. 32·94	2,513	miles 2½ 38	11,620	miles 2½ 48	* 11,021	116	554	117	* 547
South Arcot	75	1,325	118	1,415	734	459	919	662	7	271	7	271	162	1,495	170	1,550
Tanjore	23	† ..	23	† ..	210	16	210	16	..	..	..	..	20	† ..	46	17
Trichinopoly	9	412	9	* 412	1,035	1,220	1,037	1,232	..	..	..	..	61	421	66	518
Salem	46	450	108	521	301	1,072	1,145	2,167	..	..	2	21	1	60	321	1,481
Total	355	4,258	485	4,703	4,408	7,379	6,011 cwt. 32·94	9,930	45 miles 13¼	58,502	72 miles 13¼	60,082	611	4,213	1,042	6,297

* Collectors do not explain the variation between these and previous years' figures.

† Value not given.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1892–93—*cont.*

Districts.	Buildings				Live-stock				Miscellaneous				Total					
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		Difference in value	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Northern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.
Direction	..	..	..	..	..	..	..	..	27	121	27	121	160	2,313	160	2,313	..	..
Ganjám	25	9,698	20	11,148	..	..	2	3,000	18	200	17	* 183	322	11,215	333	15,885	4,670	..
Vizagapatam	15	613	16	855	..	..	..	..	1	12	1	* 10	89	976	150	1,559	583	..
Gódávari	26	4,261	26	4,261	1	1,500	3	1,585	140	2,364	363	2,453	885	10,158	1,135	10,600	442	..
Kistna	47	7,193	48	8,429	..	..	..	..	22	2,702	6	* 2,460	568	11,461	597	12,664	1,203	..
Anantapur	10	10,915	13	12,567	..	..	..	..	99	244	..	* ..	315	12,093	284	13,898	1,805	..
Bellary	4	1,315	4	* 1,305	..	..	..	..	23	108	26	* 89	325	2,228	372	2,200	..	28
Kurnool	50	19,861	53	19,932	..	..	..	..	16	75	16	* 70	745	21,426	754	21,684	258	..
Total ..	177	53,856	180	58,497	1	1,500	5	4,585	346	5,826	456	5,386	3,409	71,870	3,785	80,803	8,933	..
Central Circle.																		
Direction	..	..	..	..	..	..	..	..	19	40	19	40	89	475	89	475	..	..
Nellore	9	3,114	9	* 2,079	..	..	..	..	63	5,036	240	5,154	562 miles 7¼	42,635	874 miles 7¼	44,073	1,438	..
Cuddapah	112	17,771	104	18,982	2	32	2	* 37	22	182	† ..	† ..	674 miles. 3½	33,586	797 miles 3½	35,885	2,299	..
Chingleput	16	3,265	17	3,288	..	..	..	..	40	154	31	* 27	413	4,891	545	5,190	299	..
North Arcot	40	6,015	37	6,725	..	..	..	..	169	343	† ..	† ..	1,489 miles. 2½	21,516	1,583 miles 2½ cwt. 32·94	21,438	..	78
South Arcot	12	6,136	13	7,650	..	..	..	..	480	1,544	584	1,612	1,470	11,230	1,811	13,160	1,930	..
Tanjore	5	326	5	326	..	..	..	..	22	77	1	* 60	280	419	285	419	..	..
Trichinopoly	10	2,062	10	2,062	..	..	..	..	224	479	229	* 368	1,339	4,594	1,351	4,592	..	2
Salem	..	..	17	12,886	..	..	..	..	268	545	2	* 14	616	2,127	1,595	17,090	14,963	..
Total ..	204	38,689	212	53,998	2	32	2	37	1,307	8,400	1,106	7,275	6,932 miles. 13¼	1,21,473	8,930 miles 13¼ cwt. 32·94	1,42,322	20,849	..

Collectors do not explain the variation between these and previous years' figures.

† Collectors omit to explain the omission.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1892–93—*cont.*

Districts.	Surveying, &c., Instruments				Tools				Machinery				Furniture.			
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Southern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Direction	..	..	65	641	..	..	1	30	..	..	..	..	..	..	90	682
Madura	57	944	56	* 823	345	4,091	606	5,295	..	..	..	..	115	1,065	144	1,314
Tinnevelly	49	838	62	960	603	710	840	1,237	2	170	14	178	161	1,340	310	1,866
North Coimbatore	25	77	37	630	473	35	522	1,251	..	..	..	..	156	74	160	1,383
South do.	50	59	50	59	652	† ..	652	† ..	3,206	42,447	3,206	42,447	171	49	171	49
Nilgiris	31	285	26	* 262	681	1,172	651	1,270	4	1,820	4	1,820	64	575	74	* 540
North Malabar	37	515	44	1,257	65	400	68	902	..	..	..	..	..	..	..	..
South do.	10	322	13	409	809	555	472	* 513	17	106	10	* 60	44	225	40	395
South Canara	36	63	42	577	496	940	407	* 544	..	..	..	..	84	245	112	1,018
Total ..	295	3,103	395	5,618	4,124	7,903	4,219	11,042	3,229	44,543	3,234	44,505	795	3,573	1,101	7,247
Grand Total ..	985	10,279	1,221	14,082	10,614	18,614	12,500 cwt. 32·94	24,647	3,874 miles 13¼	1,03,045	3,306 miles 13¼	1,04,587	1,874	12,224	2,676	18,443

* Collectors do not explain the variation between these and previous years' figures.

† Value not given.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1892-93—*cont.*

Districts.	Buildings				Live-stock				Miscellaneous				Total					
	On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		On hand at commencement of the year.		On hand at end of the year.		Difference in value	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Southern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
Direction	..	..	..	..	..	..	..	..	..	..	139	364	..	..	295	1,717	1,717	..
Madura	78	15,261	91	24,252	..	..	..	..	154	636	† ..	† ..	749	21,997	897	31,684	9,687	..
Tinnevelly	76	8,811	94	16,556	..	..	..	..	144	356	† ..	† ..	1,035	12,225	1,320	20,797	8,572	..
North Coimbatore ..	42	7,846	43	9,252	..	..	..	..	146	90	148	291	842	8,122	910	12,807	4,685	..
South do. ..	29	157	29	157	7	7,700	7	7,700	316	* ..	316	* ..	4,431	50,412	4,431	50,412	..	..
Nilgiris	40	6,160	48	6,203	5	2,600	5	2,600	12	75	11	80	837	12,687	819	12,775	88	..
North Malabar ..	..	..	..	..	6	6,400	9	7,850	7	57	7	57	115	7,372	128	10,066	2,694	..
South do.	24	26,933	24	27,273	17	17,502	21	31,400	168	976	117	1,118	1,089	46,619	697	61,168	14,549	..
South Canara	20	..	20	3,208	..	..	..	..	212	305	320	1,149	848	1,553	901	6,496	4,943	..
Total ..	309	65,168	349	86,901	35	34,202	42	49,550	1,159	2,495	1,058	3,059	9,946	1,60,987	10,398	2,07,922	46,935	..
Grand Total ..	690	1,57,713	741	1,99,396	88	35,734	49	54,172	2,812	16,721	2,620	15,720	20,287 miles. 13¼	3,54,330	23,113 miles 13¼ cwt. 32·94	4,31,047	76,717	..

* Value not given.

† Collectors omit to explain the omission.

ANNUAL FORM No. 74.

Forest Department, Madras Presidency.

STATEMENT of Live-stock during 1892–93 (from 1st April 1892 to 30th June 1893).

PART I.

In possession of the reporting officers throughout the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep, including servants and food.	
				RS. A. P.
Northern Circle.	*Elephants.*			
Ganjám ..	Badamoti Guz	Transferred from the Gódávari district in 1891–92.	Per head ..	47 1 11
	Jung Bahadur			
Gódávari ..	Pown Guz	Purchased in July 1888	Do. ..	52 11 8
Southern Circle.				
South Coimbatore.	1. Sankara	June 1888. Received from North Malabar.		
	2. Chloe			
	3. Karthiyayani	August 1888. Received from South Malabar.		
	4. Peria Rani	May 1889. Received from South Malabar.	Do. ..	39 12 5
	5. Sinna Rani	August 1891. Received from South Malabar.		
	6. Abdul	Captured 4th October 1891		
Nilgiris	1. Latchmi	Transferred from the Anamalais on the 30th January 1892.		
	2. Chinna Latchmi ..			
	3. Mabu Baksh	Born in January 1885	Do. ..	19 3 2
	4. Akbar Baksh	Do. on 22nd February 1888		
	5. Meenatchi	Do. on 9th April 1889		
North Malabar ..	1. Phyllis	Purchased in January 1878		
	2. Peri	Captured in April 1889		
	3. Kalyani	Purchased in October 1889	Do. ..	39 3 8
	4. Lallameah	Captured in March 1891		
South Malabar ..	1. Vixen	Transferred from Wynaad in 1882 ..		
	2. Peyru			
	3. Samson	Purchased from Mr. Morgan in 1885 ..		
	4. Eva			
	5. Thebau	Captured on 3rd January 1886 ..		
	6. Juno	Do. on 17th February 1886 ..		
	7. Jupiter	Do. on 9th January 1887 ..		
	8. Mars	Do. on 24th January 1887 ..		
	9. Maharaj	Transferred from Wynaad in 1888–89.	Do. ..	29 12 5
	10. Jembu			
	11. Gordon	Captured on the 11th February 1889 ..		
	12. Eddy	Do. 10th February 1890 ..		
	13. Mary	Do. 31st March 1890 ..		
	14. Loo	Do. 24th April 1890 ..		
	15. Hercules	Do. 24th December 1890 ..		
	16. Parvathi	Transferred from South Coimbatore in August 1891.		
	17. Jessie	Captured on 10th December 1891 ..		
	Other Cattle.			
North Malabar ..	1. Two bullocks ..	Purchased in May 1890	Do. ..	9 7 10

Statement of Live-stock during 1892-93—*cont.*

Part II.

Received during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep, including servants and food.	Rs. A. P.
Southern Circle.	*Elephants.*			
South Coimbatore.	1. Phyllis II 2. Jumbo II 3. Pragasam	Captured 25th September 1892	Per head ..	30 8 8
	4. Elsie 5. Cerise 6. Alice 7. Ranger	Captured 23rd September 1892		
North Malabar ..	1. Cherry	Captured in May 1892	Do. ..	31 3 2
	2. Charlie	Do. in February 1893		
South Malabar ..	1. Flo	Born on 10th October 1892	Do. ..	18 1 1
	2. Dora	Captured 10th January 1893		
	3. Tippu	Do. 25th February 1893		
	4. Maharani	Do. 2nd March 1893		
	5. Venus	Do. 1st April 1893		
	Other Cattle.			
	1. One bullock ..	Purchased in June 1892	Do. ..	9 5 5

Part III.

Gone off the list during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep, including servants and food.	Rs. A. P.	How disposed of.
	Elephants.				
South Coimbatore.	1. Maude	Captured July 1891 ..	Per head ..	36 0 3	Sold on 20th July 1892 for Rs. 300
	2. Cerise	Captured 23rd September 1892.	..	..	Died.
	3. Elsie				
	4. Ranger				
South Malabar ..	1. Dora	Captured 10th January 1893.	Per head ..	18 1 1	Handed over to the Zamorin Maharaja on receipt of ¾ of her value.
	Other Cattle.				
	1. Two Kodaikánal bulls.	Purchased in 1885 ..	Do. ..	9 9 5	Sold.
	2. Two Navanipatti bulls.	Do. in 1886 ..			
	3. Two bulls in the Gundanshola Depôt.	Purchased in 1889, of this, one was obtained by way of exchange giving Rs. 15 extra.			

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue (Land Revenue), dated 17th November 1893, Forest No. 786:—

Read—files of reports received from Collectors and Conservators on the progress of Forest Administration for 1892–93.

Resolution—dated 17th November 1893, Forest No. 786.

The Board begs to submit to Government its progress report of Forest Administration in the Madras Presidency for the fifteen months ending 30th June 1893.

2. The portions of the Northern and Central Circle Conservators' reports dealing with technical subjects, viz., natural and artificial reproduction and exotics, have been printed as an appendix to the Board's report. The report received from the Conservator, Southern Circle (Mr. Cherry), contained no information of any value in regard to practical forestry. To supply the defect an abstract of the district reports of this Circle on the subject is printed in Appendix E.

3. Although the special attention of Collectors was drawn to the numerous omissions noticed in the report for 1891–92, the Board regrets that many similar omissions have been found in the district reports now under review. The District Forest-officers concerned should be warned to be more careful and also more punctual in future.

4. The information from the districts necessary for the compilation of the statistical returns was not complete in the Board's office till the 23rd October.

(A true Extract.)

(Signed) W. S. MEYER,
Secretary.

ORDER—dated 29th December 1893, No. 1103, Revenue.

Forest No. 398.

With its Proceedings of November 17, 1893, read above, the Board submits its annual report on the administration of the Madras Forest Department during the year 1892–93. The period under review has been extended to June 30, in order to cover the special forest year which has now been declared to end on that date; the figures given in the report accordingly relate to a period of 15 months, and this fact has to be borne in mind in comparing them with the statistics of previous years. The report was received in the Government office on December 2, the date prescribed for its submission being November 15.

2. *Administrative changes.*—The most important administrative changes introduced during the period under review were (1) the introduction of the scheme of reorganisation of the superior staff of the Forest Department, and (2) the abolition of the office of the Examiner of Forest Accounts and the transfer of that officer's examination and audit work to the Accountant-General. The scheme of reorganisation sanctioned by the Government of India in July 1891 was not introduced until June 1892, although, as indicated in paragraph 2 of last year's review, it was given retrospective effect from 21st October 1891. The transfer of the audit to the Accountant-General was only sanctioned by the Government of India in November 1892, and the scheme could not therefore be brought into effect before the commencement of the current financial year.

3. *Areas and boundaries.*—The areas under the control of the Department at the commencement and at the close of the period under review are shown in detail in the statement appended to paragraph 9 of the report, and are reproduced in abstract below:—

—	Area on 1st April 1892.	Added during 15 months ending June 30, 1893.	Excluded during the same period.	Area on 30th June 1893.	Net increase or decrease.
Reserved forests	7,175	2,441	180	9,436	+ 2,261
Do. lands	9,404	1,075	2,728	7,751	— 1,653
Total ..	16,579	3,516	2,908	17,187	+ 608

In former years a third item was added to this list under the head of "other forests," but this has now been rightly excluded, as the areas in question were not under the control of the Department. In accordance with the policy of Government the areas classed as "reserved lands" are gradually being settled under Chapter II of the Act and gazetted as "reserved forests," and the area shown as having been excluded from the former class of reserves has, for the most part, become absorbed in the latter. The total increase to the area of reserved forests would have been larger but for the exclusion of 178 square miles in the Tinnevelly district owing to the rectification of areas after survey. As the Board points out, the increase is mainly the result of the notification of large areas in Kistna, Bellary, Cuddapah, North and South Arcot and Salem, and more especially in Kurnool (though the Board has omitted to notice this fact) where four large blocks aggregating an area of 658 square miles were gazetted during the year as "reserved forests."

4. The total area under the control of the Department on June 30, 1893, was 17,187 square miles, or slightly less than one-third of the whole extent of lands at the disposal of Government. The areas under control in the various districts are shown in Abstract B appended to paragraph 10 of the report, and, as pointed out by the Board, vary very considerably, being 67·8 per cent. of the unoccupied area in Coimbatore and 64·5 per cent. in the Nilgiris, and averaging less than 20 per cent. in the districts of Ganjám, Anantapur, Chingleput and Malabar, and only 3·1 per cent. in Tanjore. The work of selection of further areas for reservation is being pushed on and is said to have been completed in North Arcot and Salem. In the districts

of Gódávari, Chingleput, Madura, Malabar and the Nilgiris, moreover, the extent of final reservation has practically been determined, and the Board has recently submitted a report from the Collector of Nellore containing definite proposals for the formation of reserves in his district. But, as shown in Appendix C of the report, there remains out of the area, already brought under control, a considerable balance of 1,669 square miles to be transferred for settlement, and adding to this the area of future selections, which was recently estimated by the Board at 5,872 square miles (Board's Proceedings read in G.O., No. 233, dated 14th March 1893), it is evident that much work will have to be done before the reservation of forests in the whole Presidency can be brought to a close. The completion of the Revenue survey in Anantapur and South Canara, the last two districts of the Presidency remaining unsurveyed, will, however, facilitate the work of selection and settlement of forests in those districts.

5. *Settlement.*—The details of the progress made in the work of forest settlement are shown in Appendix A of the report. The total area finally gazetted as "reserved forest" during the 15 months under review is compared below with the corresponding figures of previous years:—

AREAS notified under section 16 of Act V of 1882 and coming into force during the year.

1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	1892–93, *i.e.*, 15 months ending June 30, 1893.
SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
715	404	307	1,374	2,063	2,261

This statement shows that during the last four years the outturn of settlement work, as evidenced by the final notifications, has steadily increased. The work of the Special Forest Settlement-officers is reviewed in paragraph 17 of the report, in which it is shown that 246 blocks with an aggregate area of 2,036 square miles were finally gazetted after settlement by these officers; the corresponding figures in the previous year were 164 and 2,765. The Board points out that there has also been a general falling off in the total area settled and reported on, but it is observed that the total number of blocks so settled was considerably in excess of the number settled in 1891–92, the figures being 198 and 122 respectively. As noticed in previous reports, the size of a block is not necessarily any criterion of the difficulty of settling it, and the number of claims put forward, the intricacy of the boundaries selected, and the nature of the country, in which the block is situated, have also to be taken into account. The work performed by all the special officers, with the exception of Mr. Lever, appears to have been satisfactory. The Government has already directed the submission of an early report on the poor returns of work shown by Mr. Lever (G.O., No. 3961, dated 2nd November 1893). The outturn of settlement work by Revenue Divisional officers was not satisfactory, and now that the Secretary of State has negatived the proposal to appoint an additional Settlement-officer for the two Northern districts, the Collectors of those districts should see that the work is taken in hand as soon as possible by the ordinary Revenue staff. There were in Ganjám 49 blocks with a total area of 442 square miles pending with Divisional officers on June 30, 1893, and in Vizagapatam 16 blocks with a total area of 249 square miles. Of the blocks awaiting settlement in Ganjám, 23 with an aggregate area of 394 square miles were notified for settlement so far back as 1884–85, and the Government trusts that endeavours will be made to clear off these long-standing arrears. The delay is attributed mainly to the inadequacy of the sketch-maps originally prepared. The question of preliminary forest surveys has already been fully dealt with in G.O., No. 875, dated 10th October 1893, and in the Board's Proceedings read therein, and His Excellency in Council will only reiterate the opinion that the possession of an accurate map of the proposed reserve at the commencement of operations is the corner-stone of the whole settlement.

6. *Demarcation.*—The following table shows the outturn in miles of preliminary and permanent demarcation for the last three years :—

—	1890–91.	1891–92.	1892–93.
Preliminary demarcation	345	1,864	2,627
Permanent do.	2,343	2,429	2,837
Total ..	2,688	4,293	5,464

The work done under each head shows a considerable increase on that performed in previous years. The figures of 1891–92 are, however, admittedly inaccurate and the value of the above comparison is therefore but small. It is observed that the details of the demarcation completed up to the end of 1891–92, and of the charges incurred, as shown in last year's report, differ very largely from those now furnished, and it is merely stated that statistics then given were incorrect. The great divergence between the figures in question is demonstrated in the subjoined statement, and the explanation given by the Board is quite inadequate :—

—		Miles.	Cost.	Average cost per mile during 1891–92.
			Rs.	Rs. A. P.
Preliminary demarcation.	As given in last year's report.	7,395	65,927	8 14 8
	As now given ..	4,773	28,398	5 8 4
				Total average cost per mile.
				Rs. A. P.
Permanent do.	As given in last year's report.	14,249	1,72,026	12 1 2
	As now given ..	12,868	1,83,264	14 3 10

7. The figures of outturn during the period under review are possibly more reliable than those of the previous year, but the statistics of cost are apparently of no value. The total charges shown under the head of demarcation in the audited accounts amount to Rs. 73,804, whereas the figures in Abstract G and in paragraph 22 of the report give a total of Rs. 53,794. Moreover, the details of cost in the various districts, as shown in this abstract, differ vitally from the Accountant-General's figures in form No. 64, and the average district rates per running mile, which are reviewed at length by the Board, are probably almost entirely worthless. Taking, however, the total amount of demarcation of all kinds performed during the period under review, and calculating on the figures of cost shown in the audited accounts, the average rate per running mile for the Presidency comes to Rs. 13½, as compared with Rs. 11 for the two preceding years worked out on the same principles. This increase is unsatisfactory, but is partly accounted for by the fact that heavy charges were incurred in Anantapur and Cuddapah on stone walls which were erected as famine works. The large expenditure during the 15 months under review calls, however, for further inquiry, and the matter should engage the attention of the Board and Conservators. The Government trusts that every endeavour will be made to obtain more reliable statistics of this important work and of the cost thereof.

8. *Surveys and working plans.*—These subjects are fully dealt with in Chapter III of the Board's report. The large increase of outturn shown by the Survey of India Party is very satisfactory, and the steady decrease in the cost rate per square mile, noticed in previous years was at the same time maintained. The returns of departmental work are not encouraging, but the Government is glad to learn that arrangements have now been made for the training of Foresters in survey work. The great success of the schools recently started by the Superintendent, Revenue Survey, for the

training of karnams, would indicate that no great difficulty should be experienced by Forest subordinates in qualifying themselves to perform this duty, and the system of training adopted in respect of Revenue Inspectors should, *mutatis mutandis*, be applied to Foresters and Rangers. The objections raised by the Government of India, when reviewing the annual report of 1891–92, in regard to the administration of preliminary surveys, have been dealt with in G.O., No. 875, dated 10th October 1893, to which allusion has already been made in paragraph 5 *supra*. The progress made in the preparation of working plans, as remarked by the Board, is necessarily delayed until selection and settlement are further advanced and the subordinate staff is increased.

9. *Forest offences.*—The following statement compares for each Circle (1) the number of cases for disposal, (2) the number disposed of, (3) the number of acquittals (4) the percentage of cases compounded to cases disposed of, and (5) the percentage of acquittals to the number of cases dealt with by the magistracy :—

STATEMENT of Forest offences.

		Number of cases for disposal.			Number of cases disposed of.	
		Cases pending at beginning of the year.	New cases.	Total.	Cases withdrawn.	Cases compounded.
1		2	3	4	5	6
Northern Circle	1891–92	349	2,010	2,359	3	595
	1892–93	468	3,328	3,796	58	642
Central Circle	1891–92	513	4,723	5,236	244	2,338
	1892–93	887	5,168	6,055	526	2,639
Southern Circle	1891–92	174	1,391	1,565	53	579
	1892–93	201	2,409	2,610	112	825
Total	1891–92	1,036	8,124	9,160	300	3,512
	1892–93	1,556	10,905	12,461	696	4,106

		Number of cases disposed of—*cont.*		Number of acquittals.	Percentage of cases compounded to cases disposed of.	Percentage of acquittals to cases dealt with by magistracy.
		Cases dealt with by magistracy.	Total.			
		7	8	9	10	11
Northern Circle	1891–92	1,293	1,891	302	31·5	23·3
	1892–93	2,162	2,862	425	22·4	19·7
Central Circle	1891–92	1,766	4,348	415	53·8	23·5
	1892–93	2,222	5,387	520	49·0	23·4
Southern Circle	1891–92	737	1,369	211	42·3	28·6
	1892–93	1,292	2,229	273	37·0	21·1
Total	1891–92	3,796	7,608	928	46·1	24·4
	1892–93	5,676	10,478	1,218	39·2	21·5

There has again been a large increase in the number of offences of which the Forest Department has taken cognizance, and the total number of cases taken up during the period under review is considerably more than double the number returned in 1889–90. The increase has been steady in recent years, but, as pointed out by the Board, the high figures shown in the present report are partly due to the fact that the transactions relate to a period of 15 months. The details are fully reviewed in paragraphs 30—37 of the Board's report. The highest percentage of acquittals (55) is shown against the Madura district, and the Government agrees with the Board in considering that this result is specially discreditable, for the same district

returned one of the highest percentages of acquittals in the previous year, and particular attention was then drawn to the matter. The District Forest-officer, Mr. Gass, should have explained his failure to pay attention to this important subject.

10. The Conservator's report on the numerous murders of Forest subordinates in the Cuddapah district, alluded to in paragraph 36 of the report, has since been received, and both the Conservator and Collector agree in ascribing these unfortunate occurrences mainly to the general lawlessness of the people. In a separate report the District Forest-officer has also brought to notice another instance of this feeling in the obstruction offered to the Forest-officers in the demarcation of a proposed reserve. The Government understands that the Collector has now taken this matter in hand. It is feared, however, that the recent outbreak of crime in this district gives evidence of insufficient control on the part of the superior officers; the Forest charge is a large one, and in the opinion of Mr. Gamble, the former Conservator, would provide work for four officers of the controlling staff, but the Collector and his Forest Assistants must devote more attention to the supervision of their subordinates. According to the evidence produced in the Sessions Court, the murders in question were to a great extent brought about by the extortionate practices of the low-paid officials of the Department, and His Excellency the Governor in Council trusts that the Collector and his Assistants will use their best endeavours to stamp out this evil, which is nothing less than a reproach to the administration.

11. *Forest fires and fire protection.*—The amount expended upon the protection of forests from fire was large, but the results obtained were generally satisfactory, only 2 per cent. of the protected areas in the Northern and Southern Circles being burnt. The average cost per square mile rose from less than Rs. 10 in the previous year to more than Rs. 13. There was also a large rise in the number of cases of incendiarism, 101 such offences being prosecuted as against 60 in the previous year, but as pointed out by the Board, the period under review covers one entire fire-season and part of another.

12. *Grazing.*—The receipts from grazing fees, grazing contracts and the sale of grass, for the 12 months ending with March 1893, amounted to Rs. 1,75,589 as compared with Rs. 1,83,722 realized during the preceding year, thus showing a decrease of about Rs. 8,000. The recent ruling contained in G.O., No. 647, dated 18th July 1893, to the effect that only such revenue as is derived from produce, over which the Forest Department exercises actual, and not constructive, supervision, should be credited to "Forests", will tend to diminish the above receipts in future years, for a considerable portion of them will hereafter be credited to "Land Revenue." The decrease in the year under review is mainly attributed to the fact that the season was one of better rainfall and that pasture was therefore available outside the reserves. This explanation cannot, however, be given much weight, because in the year 1891–92 grazing was allowed free or on reduced rates in several districts on account of the distress then prevailing. The decrease of nearly Rs. 10,000 in North Coimbatore should have been explained. The improved arrangements made in South Arcot for the collection of grazing fees resulted in the total receipts in that district being more than doubled during 1892–93. The Government notes that the majority of District officers are in favour of abolishing the present distinction between agricultural and non-privileged cattle, and the Board's promised report on the subject is awaited. The failure of the experiments in grass-cutting and hay-making undertaken during the last two years is to be regretted. The total loss to Government on account of the charges thus incurred amounted to Rs. 13,765. The Government agrees with the Board in considering that under more favorable conditions and judicious management the system ought to be worked successfully, but it would be inadvisable to renew the experiments until the Department is better fitted to cope with the work now devolving on it. Great care should also be taken to select proper localities where the demand is likely to be commensurate with the supply.

13. *Reproduction.*—In reviewing the report of 1891–92, the Government of India remarked that the publication was wanting in a sufficient summary of the information relating to the technical subjects dealt with in chapter IV, and the Conservators

were accordingly directed to amplify their notes thereon. The Conservators of the Northern and Central Circles have recorded their remarks upon natural and artificial reproduction during the year, and these have been printed as Appendix F to the report. His Excellency in Council has perused these notes with interest and regrets to learn that the remarks recorded by Mr. Cherry, the Conservator, Southern Circle, were not considered by the Board to be of any practical value. The Government does not, however, consider that the information afforded in Appendix F supplies the want indicated by the Supreme Government, for no summary of the notes is given and the details are more or less disjointed. It would be well if in future years the Senior Conservator were to compile a separate report on the subjects dealt with in this chapter, reviewing the operations of the whole Presidency. Separate orders will be issued on this subject when a reply has been received from the Government of India to the reference made under G.O., No. 875, dated 10th October 1893. It is satisfactory that the results of continuous protection are already very noticeable in various reserves, and the Conservator, Northern Circle, observes that the contrast between the present and the former condition of the forests is in some instances most marked. The total expenditure on plantations and cultural operations amounted to Rs. 64,797 as against Rs. 50,756 in the previous year. The bulk of these charges was incurred on plantations in the Central and Southern Circles.

14. The following statement shows the details of plantations, topes and cultural operations in the last two years:—

STATISTICS of Plantations and Cultural operations.

—		Plantations.		Topes.	
		Area in acres.	Cost in rupees.	Area in acres.	Cost in rupees.
1		2	3	4	5
Northern Circle	1891–92	934	2,593	3,517	1,204
	1892–93	936	3,008	3,542	1,902
Central Circle	1891–92	13,426·15	21,563	10,486	4,661
	1892–93	13,429·15	26,749	10,315·99	6,577
Southern Circle	1891–92	6,398·91	12,622	14,521·98	2,287
	1892–93	6,623·19	16,377	14,534·45	327
Total	1891–92	20,759·06	36,778	28,524·98	8,152
	1892–93	20,988·34	48,134	28,392·44	8,806

—		Cultural operations.		Total.	
		Area in acres.	Cost in rupees.	Area in acres.	Cost in rupees.
		6	7	8	9
Northern Circle	1891–92	422·16	1,688	4,873·16	5,485
	1892–93	459·16	1,872	4,937·16	6,782
Central Circle	1891–92	3,831	2,143	27,743·15	28,367
	1892–93	+ 100 mls. 3,873	2,450	+ 100 mls. 27,618·14	35,776
Southern Circle	1891–92	+ 100 mls. 2,172·20	1,995	+ 100 mls. 23,093·09	16,904
	1892–93	2,484·12	3,535	23,641·76	22,239
Total	1891–92	6,425·36	5,826	55,709·40	50,756
	1892–93	+ 100 mls. 6,816·28	7,857	+ 100 mls. 56,197·06	64,797
		+ 100 mls.		+ 100 mls.	

15. *Communications and Buildings.*—The total outlay on these works during the 15 months under review was Rs. 1,00,306 as compared with Rs. 72,497 in the preceding year, the percentage of outlay on the gross revenue being 5·1 and 4·2 respectively.

The expenditure on buildings was heavy, and it is observed that the charges so incurred in the Southern Circle exceed the corresponding outlay in the other two circles combined. The necessity for this heavy expenditure in the Southern districts is not explained. More than half the money was spent in the two districts of Madura and Tinnevelly alone, and the Government fears that sufficient check is not exercised by the Conservator and Collectors. The charges vary very considerably in the different districts. In Kurnool and Kistna the average cost of a hut for forest guards or watchers appears to be about Rs. 50, whereas in Madura between Rs. 500 and Rs. 600 were spent on such buildings at various places, and "gardeners' quarters" at Gundan sholah cost Rs. 880. In Tinnevelly also the charges appear to be heavy; tannah huts are valued at about Rs. 200 and expensive bungalows have been erected in several localities. In South Coimbatore "clerks' and peons' quarters" have been erected at a cost of Rs. 500, while "guards' huts" are charged at about Rs. 100; the expenditure on the depôt at Pollachi is also noticeable, the figure being Rs. 1,000. The Board's special attention is called to this matter.

16. The expenditure on roads appears, on the other hand, to be insufficient, and the scheme for the general development of forest communications, alluded to in the Board's report, should be expedited. Outlay under this head should eventually be productive of increased revenue, for lines of communication are in many cases almost entirely wanting, and the produce of the forests cannot be brought upon the market. Expenditure on buildings is doubtless very necessary, but should be curtailed as far as possible, and great care must be taken to prevent the waste of money on small works, which the list given in Appendix I would seem to indicate.

17. *Tramways.*—The figures given in Appendix H to demonstrate the financial results of the tramways working in Nellore, North Arcot and South Coimbatore are interesting, but it would be better to adopt a uniform method of calculating the gain and loss for all tramways. According to the statistics furnished, the amount saved by the transport of casuarina fuel by tramway in Nellore was more than Rs. 3,000 during the year. It should have been explained why the estimated charge for country carts was taken at annas 13–11 per ton mile for the Nellore casuarina plantations and at only annas 3–9 for the Sríharikóta range. The details of revenue and expenditure for the Cuddapah tramway are not understood.

18. *Yield and Working.*—The subjoined statement gives particulars of the yield of the forests during the last three years:—

COMPARATIVE statement of yield for the past three years.

—	Timber including sandalwood.	Fuel.	Bamboos in number.	Minor produce in rupees.
	C. FT.	C. FT.	NO.	RS.
1890–91	3,802,497	12,168,215	18,223,447	6,58,311
1891–92	3,086,937	13,987,173	31,150,765	6,40,842
1892–93 (15 months)	2,966,556	12,138,565	20,779,393	8,03,255
Average yield for 12 months in 1892–93	2,373,244	9,710,952	16,623,514	6,42,604
Net increase or decrease during the 15 months of 1892–93 as compared with 1891–92	— 120,381	— 1,848,608	— 10,371,372	+ 1,62,413
Net increase or decrease in the average yield for 12 months of 1892–93 as compared with that of 1891–92 ..	— 713,693	— 4,276,221	— 14,527,251	+ 1,762
Average percentage of increase or decrease * ..	— 23	— 31	— 47	+ ·03

* *Note.*—The Board of Revenue has calculated the percentage of increase or decrease upon the figures of 1892–93 (15 months) as compared with those of 1891–92 (12 months). But the above figures represent the average percentage and have been calculated upon the average yield of 12 months of 1892–93 as compared with that of 1891–92.

The decrease in the number of bamboos is large, and occurs entirely under the head of removals by private agency. In Kistna a bamboo forest is reported to have been closed against cutting. The very large decrease in North Arcot (from 9,139,700

in 1891–92 to 426,322 in 1892–93) should have been explained. There was a decrease under every head except minor produce, and this is accentuated by the fact that the figures for 1892–93 relate to the operations of 15 months. The details are fully examined in chapter V of the report. The falling off in the figures of the period under review appears to have been mainly the result of the slack demand and of the large stocks of produce remaining undisposed of at the commencement of the year.

19. The comparative cost of departmental and private working and the net profit under each system are shown in the statement appended to paragraph 64 of the report. The figures must be more or less hypothetical, because it is necessary to make an arbitrary apportionment of the establishment charges between the two systems. The method adopted by the Board in the present report and in that of the preceding year is, however, the fairest that can be devised. The following table compares the results of the two years :—

	Rate of net profit in	
	1891–92.	1892–93.
Departmental working.	Rs. A. P.	Rs. A. P.
Timber *per* cubic foot	+ 0 3 0	+ 0 1 3
Fuel ,, ,,	— 0 0 1	— 0 0 1
Bamboos (each)	— 0 0 4	+ 0 0 3
Sandalwood *per* cubic foot	+ 5 10 2	+ 10 9 0
Minor produce *per* maund	— 0 1 2	— 0 10 3
Private working.		
Timber *per* cubic foot	+ 0 1 2·5	+ 0 1 4
Fuel ,, ,,	+ 0 0 2·5	+ 0 0 4
Bamboos (each)	+ 0 0 0·7	+ 0 0 1
Grazing, Minor produce	(Rates not ascertainable.)	
	Rs.	Rs.
Total net profit	1,49,242	1,70,269
	3,37,644	4,34,355

20. From this statement it appears that in each year the departmental working of timber and sandalwood showed a profit, while fuel and minor produce were worked at a loss. The net rate of loss of 4 pies per bamboo shown in 1891–92 has now been converted into a net profit of 3 pies. The net rate of profit on timber has, on the other hand, fallen from 3 annas per cubic foot to one anna and a quarter, while the figures for sandalwood show that the rate of profit has been nearly doubled. The most noticeable feature is the loss under minor produce, which is now shown as $10\frac{1}{4}$ annas per maund : the total net profit under the corresponding head for private working is, on the other hand, more than double that realized for any other kind of produce, except fuel. In 1891–92, departmental working of minor produce showed a net loss of $1\frac{1}{8}$ annas per maund and the profit from private working was again largely in excess of that obtained under other heads. These figures would seem to indicate the inadvisability of working minor produce under direct Government agency. The decision on this subject must not, however, be based purely on considerations of revenue. In hilly districts and in all localities where the jungles are situated at some distance from the market, the contract system is liable to embitter the jungle tribes against the Forest Department, and their assistance in working the forests is thereby forfeited. The matter is one of considerable importance, and the Government desires to receive a special report thereon. The statistics of profit and loss furnished in the present report should be carefully examined, and it should be ascertained whether the system of departmental working cannot be continued without loss to the State.

21. *Financial results.*—In the following statement the financial results of the 12 months ending 31st March 1893, and of the 15 months ending 30th June 1893, are compared with those of 1891–92 :—

—	Northern Circle.				Central Circle.			
	1891–92.	1892–93 (12 months).	April, May and June 1893.	Total for 15 months in 1892–93.	1891–92.	1892–93 (12 months).	April, May and June 1893.	Total for 15 months in 1892–93.
1	2	3	4	5	6	7	8	9
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	4,38,680	3,57,732	96,337	4,54,069	7,01,855	7,01,279	1,62,320	8,63,599
Charges	2,70,151	2,88,842	77,394	3,66,236	4,63,929	4,78,248	1,17,094	5,95,342
Surplus or deficit	1,68,529	68,890	18,943	87,833	2,37,926	2,23,031	45,226	2,68,257
Increase or decrease as compared with 1891–92 during (1) 12 months ending 31st March 1893.	— 99,639				— 14,895			
Increase or decrease as compared with 1891–92 during (2) 15 months ending 30th June 1893.	— 80,696				+ 30,331			

—	Southern Circle.				Total.			
	1891–92.	1892–93 (12 months).	April, May and June 1893.	Total for 15 months in 1892–93.	1891–92.	1892–93 (12 months).	April, May and June 1893.	Total for 15 months in 1892–93.
	10	11	12	13	14	15	16	17
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	5,53,680	5,18,201	1,29,949	6,48,150	16,94,215	15,77,212	3,88,606	19,65,818
Charges	5,32,074	5,63,168	1,14,182	6,77,350	12,66,154	13,30,258	3,08,670	16,38,928
Surplus or deficit	21,606	— 44,967	15,767	— 29,200	4,28,061	2,46,954	79,936	3,26,890
Increase or decrease as compared with 1891–92 during (1) 12 months ending 31st March 1893.	— 66,573				— 1,81,107			
Increase or decrease as compared with 1891–92 during (2) 15 months ending 30th June 1893.	— 50,806				— 1,01,171			

The results of the past official year have been already fully reviewed by Government in passing orders on the budget estimates of the Forest Department for 1894–95 and do not now call for any special remarks. The surplus for the 15 months of 1892–93, as compared with that of the official year 1891–92, shows a slight increase in the Central Circle, while there was a decrease in both the Northern and Southern Circles amounting in all to Rs. 1,31,502. The net result of the period under review is a decrease in the surplus of receipts over expenditure of Rs. 1,01,171 as compared with the surplus of 1891–92. The figures for the past 5 years and of the 15 months under review are shown below :—

—	Receipts.	Charges.	Surplus.
	Rs.	Rs.	Rs.
1888–89	15,15,006	12,16,674	2,98,332
1889–90	15,57,627	11,65,358	3,92,269
1890–91	17,95,408	12,53,284	5,42,124
1891–92	16,94,215	12,66,154	4,28,061
1892–93 (1) 12 months ending 31st March 1893.	15,77,212	13,30,258	2,46,954
1892–93 (2) 15 months ending 30th June 1893..	19,65,818	16,38,928	3,26,890

22. In conclusion, His Excellency the Governor in Council desires to place on record his thorough appreciation of the excellent arrangements made by Mr. Arundel, the Commissioner now in charge of the Forest Department, for the general supervision

of his subordinates and for the control of their operations. It is observed that Mr. Arundel was able to make tours of inspection through ten districts during the period under review, and others have since then been visited. The Forest Commissioner holds in this Presidency a position analogous to that of the Inspector-General of Forests in Provinces directly under the Supreme Government, and it is most desirable that the administration of the department should be largely influenced by his personal control. The present report affords ample evidence of the fact that Mr. Arundel is fully conscious of this important principle, and His Excellency in Council observes with satisfaction that systematic arrangements have been made to give effect thereto. The orders issued to Conservators and District Forest-officers in regard to the regular inspection of the forests under their charge form one instance in point, and it is further noted that periodical returns are now required of the progress of many operations which in former years have been carried on without any fixed system. The work of the department is doubtless hampered to a great extent by the insufficiency of the present subordinate staff, and there is reason to believe that much revenue is annually sacrificed on this account. The Right Honorable the Secretary of State has for the present postponed his sanction to the proposals made by this Government for an increase to the establishment, and the matter is still under consideration; but His Excellency in Council trusts that the scheme elaborated in 1891 may before long be approved, and the administration of the forests be thereby placed upon an efficient basis.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

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